Environmental Initial Study

Old Juvenile Hall Justice Center Demolition

Draft Initial Study Checklist
Proposed Mitigated Negative Declaration
References and Documentation

Lead Agency:

Shasta County
Department of Public Works
1855 Placer Street
Redding, CA 96001

Technical Assistance By:

SHN Consulting Engineers & Geologists
350 Hartnell Avenue, Suite B
Redding, CA 96002

September 2023

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Shasta County
Environmental Checklist Form

1. **Project Title:** Old Juvenile Hall Justice Center Demolition

2. **Lead Agency:**

   Shasta County Department of Public Works
   1855 Placer Street
   Redding, CA 96001

3. **Contact Person:**

   Shawn Ankeny, PE, PLS
   Principal Engineer
   Shasta County Department of Public Works
   1855 Placer Street
   Redding, CA 96001
   (530) 245-6810
   sankeny@co.shasta.ca.us

4. **Project Location:**

   The project site is located at 2680 Radio Lane (APN 048-140-007), approximately 2,000 feet east of State Route 273 (SR-273) in the City of Redding.

5. **Applicant's Name and Address:**

   Shasta County Department of Public Works
   1855 Placer Street
   Redding, CA 96001

6. **General Plan Designation:** "PF-I" (Public Facilities or Institutional)

7. **Zoning:** "PF" (Public Facilities)

8. **Description of Project:**

   The County proposes to abatement, demolition, remove, and dispose of the former 21,275 square foot, 56-bed Juvenile Justice Center facility. Upon the completion of demolition and cleanup activities, a new security chain link fence will be installed around the perimeter of the property. No onsite development is proposed at this time. The existing garden, located on the northern portion of the site, will continue to be maintained and utilized by the Department of Probation.

9. **Surrounding Land Uses and Setting:**

   The proposed project is situated in a developed area of central Redding west of the Sacramento River. Development within the vicinity includes a mix of County owned facilities, such as the Department of Probation and Shasta County Health and Human Services and residential uses south along Radio Lane.

   The former juvenile hall facility was constructed circa 1953. Portable classrooms and maintenance sheds were completed after 1980. The site is relatively flat and is situated at approximately 480 feet above mean sea level and is occupied by the County's former juvenile hall facility, which consists of administrative buildings, paved parking areas for staff and visitors, inmate classrooms, a basketball court, a garden, and a grass field for

recreation. Most of the project site has been previously developed or altered from its natural state. Numerous ornamental trees and shrubs have been planted around buildings, and turf grasses have become established in the former recreation areas.

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

California Department of Fish and Wildlife (CDFW)
California Regional Water Quality Control Board (RWQCB)
City of Redding Department of Public Works
Shasta County Department of Probation
Shasta County Department of Public Works (DPW)
Shasta County Resource Management Agencies (Air Quality, Environmental Health, Building, Fire)

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.?

Consultation and correspondence with various culturally affiliated Tribal groups and agencies were conducted in accordance with Public Resources Code (PRC) Section 21080.3.1 (AB 52). On June 22, 2023, the County initiated environmental review under the California Environmental Quality Act (CEQA) for the proposed Old Juvenile Hall Justice Center Demolition project. The County sent a certified project notification letter to the Wintu Tribe of Northern California and the Winnemem Wintu Tribe, each a California Native American Tribe that is traditionally and culturally affiliated with the geographic area of the proposed project, and the Redding Rancheria, on June 22, 2023, pursuant to PRC Section 21080.3.1, notifying that the project was under review and to provide the Tribes 30 days from the receipt of the letter to request consultation on the project in writing. No responses were received requesting initiation of consultation under the provisions of AB 52.

Note: *Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process (see PRC Section 21080.3.2.). Information may also be available from the California Native American Heritage*

Commission's Sacred Lands File per PRC Section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that PRC Section 21082.3(c) contains provisions specific to confidentiality.

Information contained in the Cultural Resources Inventory for the Shasta County Juvenile Hall Expansion Project on Radio Lane, Shasta County, California (ENPLAN, 2010) related to the specific location of prehistoric and historic sites is confidential and exempt from the Freedom of Information Act (FOIA) and the California Public Records Act (CPRA); therefore, site specific cultural resource investigations are not attached to this Initial Study. Professionally qualified individuals, as determined by the California Office of Historic Preservation, may contact the Shasta County Department of Resource Management, Planning Division directly in order to inquire about its availability.

12. Purpose of this Document: This document analyzes the environmental effects of the proposed Old Juvenile Hall Justice Center Demolition project and makes appropriate findings in accordance with Section 15070 of the State CEQA Guidelines. In addition, this document has been prepared to the degree of specificity appropriate to the current proposed action, as required by Section 15146 of the State CEQA Guidelines. The analysis considers the actions associated with the proposed project to determine the short-term and long-term effects associated with their implementation.

13. List of Attachments:

Attachment A	Air Quality & GHG Modeling Outputs
Attachment B	Biological Resources Report
Attachment C	Structural Surveys for Special-Status Bat Species
Attachment D	Cultural Resources Inventory Report
Attachment E	Historical Resource Evaluation Report
Attachment F	Hazardous Materials Abatement Work Plan

Section 1 – Introduction and Purpose

1.1 Introduction

Shasta County (County), as the Lead Agency, has prepared this Initial Study to provide the general public and interested public agencies with information about the potential environmental impacts of the proposed Old Juvenile Hall Justice Center Demolition project (proposed project). Details about the proposed project are included in Section 2.0, PROJECT DESCRIPTION, of this Initial Study. This Initial Study has been prepared in accordance with the California Environmental Quality Act (CEQA) of 1970 (as amended), codified in California Public Resources Code Section 21000 *et seq*., and the State CEQA Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3). Pursuant to these regulations, this Initial Study identifies potentially significant impacts and, where applicable, includes mitigation measures that would reduce all identified environmental impacts to less than significant levels. Mitigation measures have been proposed to avoid or minimize any significant impacts that were identified. This Initial Study supports a MND pursuant to CEQA Guidelines Section 15070.

1.2 Lead Agency

The Lead Agency is "*the public agency which has the principal responsibility for carrying out or approving a project,*" which may be subject to CEQA (PRC Section 21067). Accordingly, the Shasta County is the CEQA Lead Agency.

1.3 Purpose of the Initial Study

CEQA requires that public agencies document and consider the potential environmental effects of the agency's actions that meet CEQA's definition of a "project." Briefly summarized, a "project" is an action that has the potential to result in direct or indirect physical changes in the environment. A project includes the agency's direct activities as well as activities that involve public agency approvals or funding. Guidelines for an agency's implementation of CEQA are found in the "CEQA Guidelines" (Title 14, Chapter 3 of the California Code of Regulations).

Provided that a project is not exempt from CEQA, the first step in the agency's consideration of its potential environmental effects is the preparation of an Initial Study. The purpose of an Initial Study is to determine whether the project would involve "significant" environmental effects, as defined by CEQA, and to describe feasible mitigation measures that would avoid significant effects or reduce them to a level that is less than significant. If the Initial Study does not identify significant effects, then the agency prepares a Negative Declaration. If the Initial Study notes significant effects but also identifies mitigation measures that would reduce these significant effects to a level that is less than significant, then the agency prepares a Mitigated Negative Declaration. If a project would involve significant effects that cannot be readily mitigated, then the agency must prepare an Environmental Impact Report. The agency may also decide to proceed directly with the preparation of an Environmental Impact Report without an Initial Study.

The proposed project is a "project" as defined by CEQA and is not exempt from CEQA consideration. The County has determined that the project may potentially have significant environmental effects and therefore would require preparation of an Initial Study. This Initial Study describes the proposed project and its environmental setting, discusses the potential environmental effects of the project, and identifies feasible mitigation measures that would eliminate any potentially significant environmental effects of the project or reduce them to a level that would be less than significant.

This Initial Study is a public information document that describes the proposed project, existing environmental setting at the project site, and potential environmental impacts of construction and operation of the proposed project. It is intended to inform the public and decision-makers of the proposed project's potential environmental impacts and to document the lead agency's compliance with CEQA and the State CEQA Guidelines.

This Initial Study concludes that the project would have potentially significant environmental effects, all of which would be avoided or reduced to a level that would be less than significant with recommended mitigation measures. As a result, the County has prepared a Mitigated Negative Declaration and has issued a Notice of Intent to adopt the Mitigated

Negative Declaration for the project. The time available for public comment on the Initial Study and Mitigated Negative Declaration is shown on the Notice of Intent.

1.4 Incorporation by Reference

In accordance with Section 15150 of the State CEQA Guidelines to reduce the size of the report, the following documents are hereby incorporated by reference into this Initial Study and are available for public review at the Shasta County Department of Public Works. A brief synopsis of the scope and content of each of these documents is provided below.

City of Redding 2000 – 2020 General Plan

The project site lies within the boundaries of the City of Redding 2000-2020 General Plan. The General Plan is the long-range planning guide for growth and development for the City of Redding. Adopted in October 2000, the General Plan helps to ensure that day-to-day decisions conform to the long-range program designed to protect and further the public interest as related to the City's growth and development and mitigate environmental impacts. The General Plan also serves as a guide the private sector of the economy in relating its development initiatives to the public plans, objectives, and policies of the City. The City's General Plan was utilized throughout this Initial Study as the fundamental planning document governing development on the proposed project site.

City of Redding Zoning Ordinance

The Zoning Ordinance (Title 18) of the City of Redding Municipal Code (RMC) offers a precise land-use plan for the City to "promote the growth of the City in an orderly manner and to promote and protect the public health, safety, peace, comfort and general welfare." The City is divided into 29 districts in order to classify, regulate, restrict, and segregate the use of land and to regulate the density of population. Additionally, development standards are established for each district to ensure that activities can be reasonably accommodated in a manner that is compatible with adjacent land uses. The City's Zoning Ordinance is intended to: 1) Direct growth with a priority on those areas where infrastructure and urban services can be economically provided; 2) Ensure consistency between General Plan designations and policies and zoning districts; 3) Provide compatibility between land uses; and 4) Establish standards regulating the use and physical development of land.

Final Environmental Impact Report for the City of Redding 2000 – 2020 General Plan

The purpose of the General Plan EIR was to assess all potential environmental impacts that could occur as a result of the buildout of the General Plan. The analysis included evaluation of the following issues: Land Use, Housing and Population; Transportation and Circulation; Public Facilities and Services (Water, Wastewater and Storm Drainage); Other Public Facilities and Services (Law Enforcement, Fire Protection Services, Schools, Parks and Recreation, Solid Waste, Electricity and other Public Utilities); Natural Environment; and Health and Safety. The General Plan EIR concluded that the loss of agricultural resources (project and cumulative) and air quality impacts (project and cumulative) were significant and unavoidable with buildout of General Plan land uses.

Shasta County General Plan

The Shasta County General Plan is a statement of public policy reflecting the aspirations and values of Shasta County residents which is adopted by their elected representatives. The Shasta County General Plan, amended 2004, identifies strategies, policies, and implementation recommendations for land use within its planning area. The Shasta County General Plan is a long-range comprehensive plan that governs growth and development in the unincorporated areas of Shasta County. The function of the General Plan is to provide a policy framework that must be reflected in the zoning ordinance, specific plans, and other development guidelines.

1.5 Project Environmental Studies

As part of the preparation of this Initial Study, the following studies were prepared or utilized to develop baseline information and project-related impact discussions. Hard copies of these studies are available for inspection at the Shasta County Department of Public Works, 1855 Placer Street, Redding California 960001, during normal business hours (8:00 a.m. to 5:00 p.m. Monday through Friday):

- *Biological Study and Wetland Screening For Expansion of Juvenile Hall Facility*, prepared by ENPLAN, April 28, 2010.
- *Cultural Resources Inventory for the Shasta County Juvenile Hall Expansion Project on Radio Lane, Shasta County, California*, prepared by ENPLAN, June 1, 2010.
- *Hazardous Materials Abatement Work Plan*, prepared by ACC Environmental Consultants, January 2022.
- *Historical Resource Evaluation of Old Shasta County Juvenile Justice Center, 2680 Radio Lane, Shasta County, California*, prepared by Daly & Associates, August 2023.
- *Structural Surveys for Special-Status Bat Species*, prepared by Swaim Biological Incorporated, September 7, 2023.

Information contained in the cultural resources inventory report identified above related to the specific location of prehistoric and historic sites is confidential and exempt from the Freedom of Information Act (FOIA) and the California Public Records Act (CPRA); therefore, this information is not included in as an attachment to this Initial Study. Professionally qualified individuals, as determined by the California Office of Historic Preservation, may contact the Shasta County Department of Public Works directly to inquire about its availability.

1.6 Environmental Review Process

This Initial Study is being circulated for public and agency review as required by CEQA. Because State agencies will act as responsible or trustee agencies, the County will circulate the Initial Study to the State Clearinghouse of the Governor's Office of Planning and Research for distribution and a 30-day review period. During the review period, written comments may be submitted to:

Shasta County
Department of Public Works
1855 Placer Street
Redding, CA 96001

Shawn Ankeny, PE, PLS
Principal Engineer
Phone: (530) 245-6810
sankeny@co.shasta.ca.us

Upon completion of the 30-day public review period, written responses to all substantive environmental issues raised will be prepared and available for review prior to the public hearing before the Shasta County Board of Supervisors at which the approval of the proposed project will be considered.

Section 2 – Project Description

2.1 Project Location and Setting

Regional Setting

The proposed project is located in Shasta County in northern California, approximately 188 miles northeast of San Francisco and approximately 100 miles south of the Oregon border. Shasta County occupies the northern reaches of the Sacramento Valley, with portions extending into the southern reaches of the Cascade Range (see Figure 2-1, PROJECT LOCATION). Topography within the County ranges from the flat valley area in and around the City of Redding and project site, approximately 300 to 500 feet above mean sea level (msl), to steep mountainous areas including Mount Lassen which is 10,455 feet above msl. Mount Shasta is approximately 60 miles to the north and is within Siskiyou County which borders Shasta County to the north. The Sacramento River is the major watercourse within the County, flows out of the Cascade mountains to the north and through the center of the County and south into the Sacramento Valley.

Local Setting

The proposed project is situated in a developed area of west-central Redding west of the Sacramento River (see Figure 2-2, SITE VICINITY). Development within the vicinity includes a mix of County owned facilities, such as the Department of Probation and Shasta County Health and Human Services and residential uses south along Radio Lane.

Project Location

The project site is located at 2680 Radio Lane (APN 048-140-007), approximately 2,000 feet east of State Route 273 (SR-273) in the City of Redding (see Figure 2-3, AERIAL PHOTOGRAPH). The County's new juvenile rehabilitation facility is located immediately to the east of the project site.

Existing Conditions

The former juvenile hall facility was constructed circa 1953. Portable classrooms and maintenance sheds were completed after 1980 (ENPLAN, 2010a). The site is relatively flat and is situated at approximately 480 feet above mean sea level and is occupied by the County's former juvenile hall facility, which consists of administrative buildings, paved parking areas for staff and visitors, inmate classrooms, a basketball court, a garden, and a grass field for recreation. Most of the project site has been previously developed or altered from its natural state. Numerous ornamental trees and shrubs have been planted around buildings, and turf grasses have become established in the former recreation areas. The Old Juvenile Hall Justice Center has been abandoned since the construction and transfer of operations to the new juvenile rehabilitation center located immediate to the west at 2684 Radio Lane.

Oregon Gulch, historically a seasonal tributary of the Sacramento River, but now sustained in summer by irrigation leakage from the Anderson-Cottonwood Irrigation District (ACID) canal and urban runoff, flows eastward across the northern portion of the project area. Oregon Gulch drains the foothills west of the City of Redding. The stream has been heavily impacted by human activities, including residential and commercial development along its banks, bank degradation from off-highway vehicles, and illegal dumping of trash. Riparian vegetation along the lower reaches adjacent to the project site is well developed. In the study area, the canopy along Oregon Gulch consists primarily of valley oak, interior live oak, oracle oak, and willows; the shrub layer includes Himalayan blackberry, blue elderberry, and California grape (ENPLAN, 2010b).

General Plan and Zoning

The City of Redding General Plan designates the proposed project site as "PF-I" (Public Facilities or Institutional). The project site is zoned "PF" (Public Facilities).

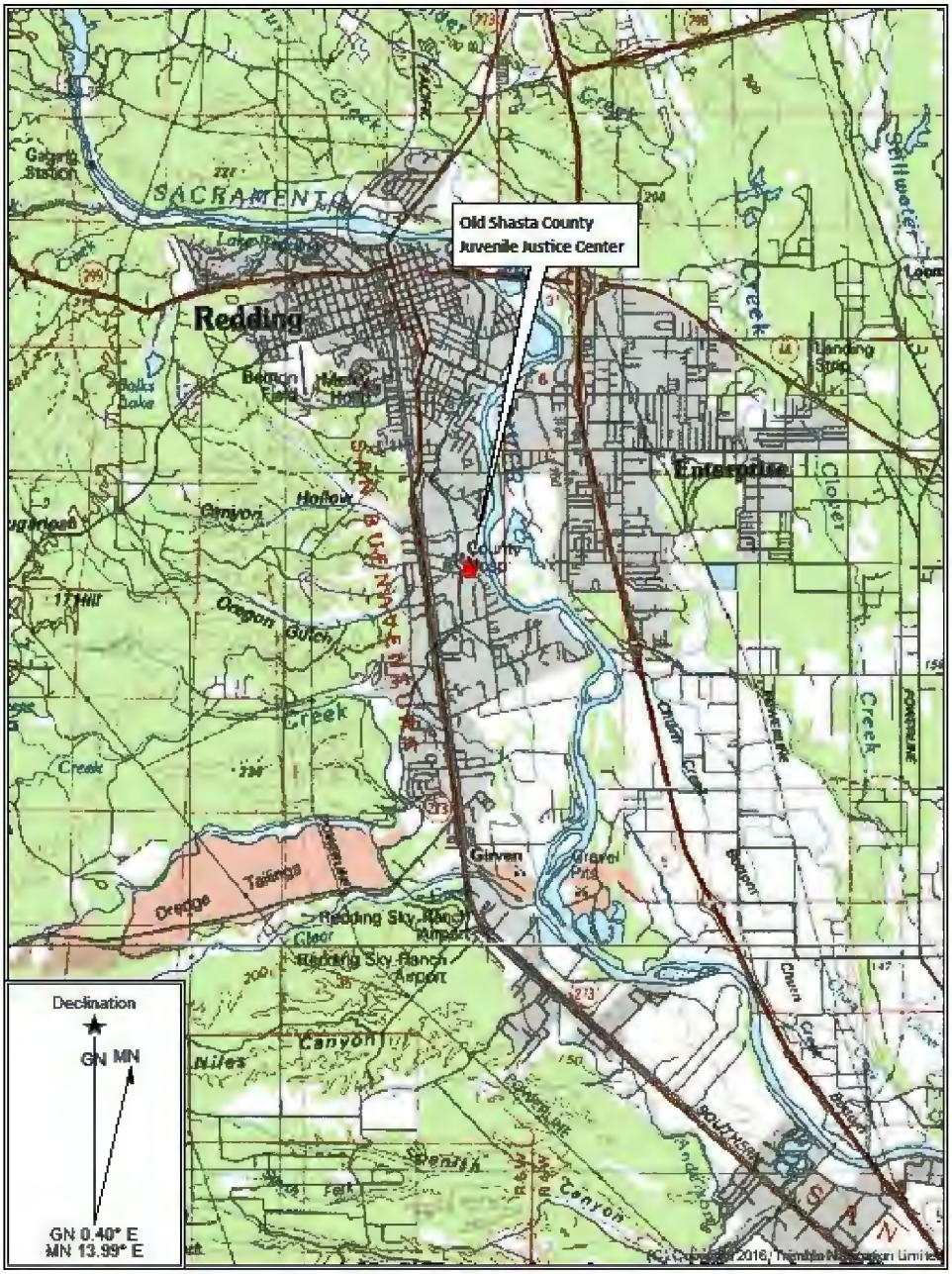

Figure 2-1: Project Vicinity
Old Shasta County Juvenile Justice Center
Redding, CA

MAP SOURCE: DALY & ASSOCIATES, 2023

Figure 22: Site Vicinity
Old Shasta County Juvenile Justice Center
2680 Radio Lane, Redding, CA

MAP SOURCE: DALY & ASSOCIATES, 2023

SCALE 1:1200

0 100 200

Feet

Figure 2-3: Aerial Photograph
Old Juvenile Justice Center
2680 Radio Lane, Redding
Shasta County, CA

MAP SOURCE: DALY & ASSOCIATES, 2023

2.2 Project Characteristics

The County proposes to abatement, demolition, remove, and dispose of the former 21,275 square foot, 56-bed Old Juvenile Hall Justice Center facility (see Figure 2-4, DEMOLITION SITE PLAN). Upon the completion of demolition and cleanup activities, a new 13-foot security chain link fence will be installed around the perimeter of the property (see Figure 2-5, SECURITY FENCE PLAN). No onsite development is proposed at this time. The existing garden, located within the northern portion of the site, will continue to be maintained and utilized by the Department of Probation.

Pre-Construction Activities

Three ornamental trees are anticipated to be removed near the new security fence; trees immediately adjacent to the existing structures may need to be pruned to allow equipment access. The County anticipates pruning and removing of up to three trees prior to demolition activities and before the bird nesting period. Prior to the initiation of demolition activities tree protection signs will be placed on all trees that are identified for preservation.

Abatement Activities

The proposed project includes removal and disposal of asbestos-containing floor tile and mastic, drywall and joint compound, ceramic tile underlayment roof mastic, roofing and lead waste. Demolition activities will also follow procedures contained in the Hazardous Materials Abatement Work Plan (ACC, 2022) (see Attachment F). All waste generated from abatement activities will be disposed of according to all local, State, and Federal regulations. In addition, the demolition contractor will be required to obtain daily down-wind and/or indoor air samples to ensure the risk of exposure to air borne asbestos is minimized. The proposed abatement crew will consist of approximately 8 to 12 individuals for a duration of approximately 2 weeks.

Demolition Activities

The existing main building is approximately 21,275 square feet. An additional 1,000 square feet of building area is associated with the portable school room and associate shed located at the northeast corner of the site. Table 2-1, GENERAL DEMOLITION QUANTITIES, outlines the anticipated demolition quantities based on the type of structure and other site improvements to be removed.

Table 2-1
GENERAL DEMOLITION QUANTITIES

Site No.	Description	Quantity (square feet)
1	Old Juvenile Justice Center Building	21,275
2	Sidewalks	4,380
3	Pavement	2,700
10	Portable School Room, Adjacent Shed	1,000
	TOTAL	**29,355**
Source: Shasta County. Demolition Site Plan. 2023.		

The duration of the demolition activities would be approximately three weeks, and would take place 5 days per week, Monday through Friday, with typical working hours from 7:00 a.m. to 6:00 p.m. Demolition would include removal of structures and related systems (i.e., utility box, electrical main service, gas lines, meter boxes) within the identified demolition area (see Figure 2-4, DEMOLITION SITE PLAN). The existing onsite domestic water line with be capped and abandoned in place. The existing sewer line will be capped at the edge of demolition and removed from the site. It is anticipated that demolition activities would use approximately 4,000 gallons per day of water for dust suppression during an approximate 8-day building demolition period, followed by a reduced usage of approximately 2,000 gallons per day of water over a to 7 to 12 day period of concrete breaking and continued material off hauling. To reduce water usage a DustBoss system, consisting of atomized misting technology, may be required.

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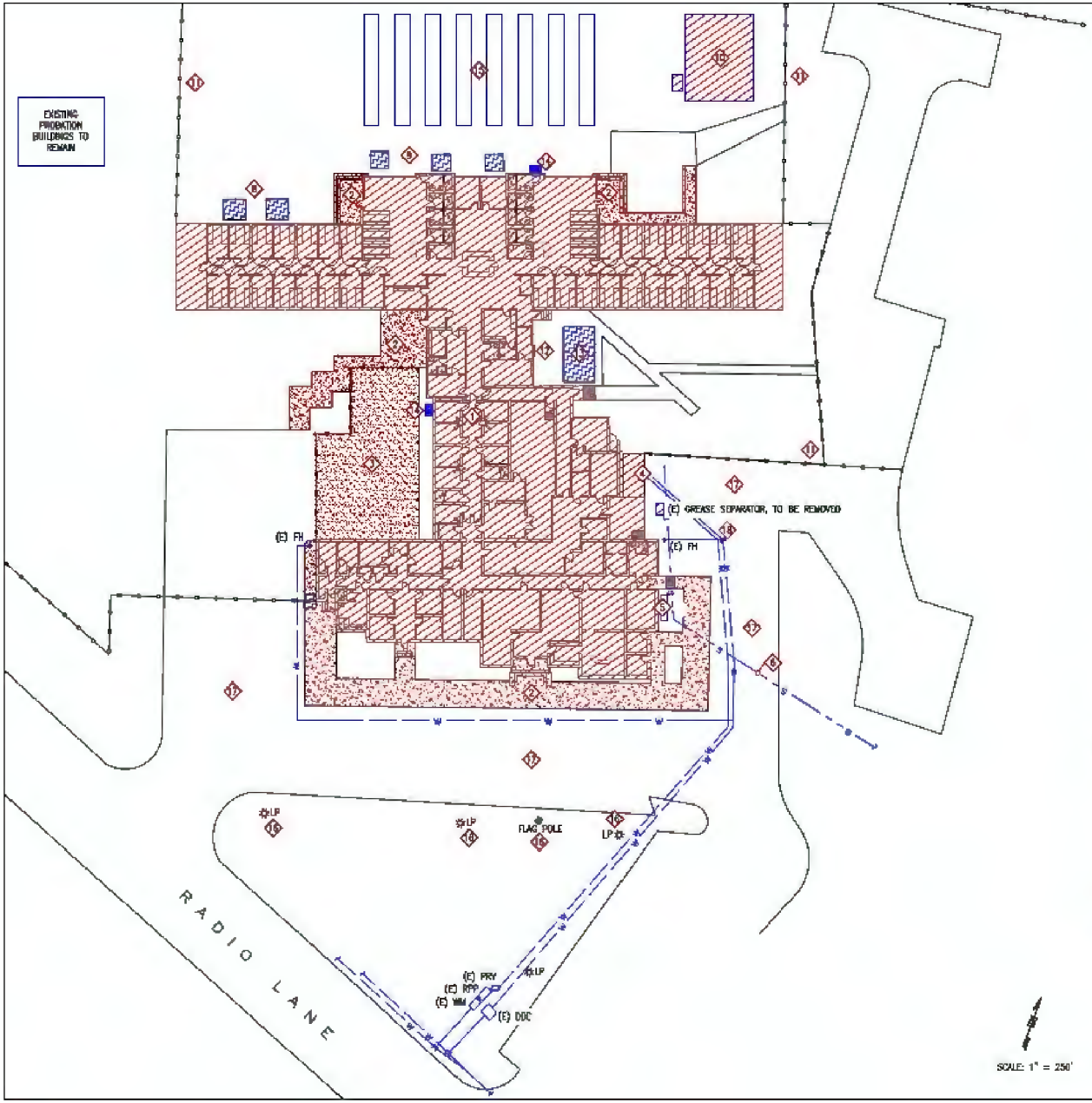

SHEET NOTES:

1. DEMOLISH, REMOVE, AND DISPOSE THE OLD JUVENILE JUSTICE CENTER INCLUDING, BUT NOT LIMITED TO, UTILITIES, APPROACHES, SLAB, AND FOUNDATION ACCORDING TO THE CONTRACT, DEMOLITION OF THE OLD JUVENILE JUSTICE CENTER, AND THESE DRAWINGS.
2. DEMOLISH, REMOVE, AND DISPOSE OF THE SIDEWALK AND OTHER IMPROVEMENTS. TRANSITIONS TO REMAINING IMPROVEMENTS SHALL BE STRAIGHT AND WITHOUT SHARP EDGES AND OTHER POSSIBLE HAZARDS.
3. DEMOLISH, REMOVE, AND DISPOSE OF THE PAVEMENT, CURB, AND OTHER IMPROVEMENTS. TRANSITIONS TO REMAINING IMPROVEMENTS SHALL BE STRAIGHT AND WITHOUT SHARP EDGES AND OTHER POSSIBLE HAZARDS.
4. WATER: CAP DOMESTIC WATER. ABANDON IN PLACE @BELOW-GRADE WATER LINE NORTH OF CAP.
5. GAS: CAP EXISTING GAS LINE ADJACENT TO WATER METER BOX AND INSTALL A LIDDED CONCRETE UTILITY BOX AT THE CAP. DEMOLISH GAS LINE TO THE NORTHEAST OF CAP.
6. SEWER: CAP SEWER LINE AND INSTALL A LIDDED CONCRETE UTILITY BOX AT CAP AT THE EDGE OF DEMOLITION. DEMOLISH AND REMOVE LINE NORTHWEST OF CAP.
7. ELECTRICAL: PULL CONDUCTOR. REMOVED CONDUIT TO EDGE OF DEMOLITION.
8. CHICKEN COOPS TO BE RELOCATED.
9. GARDEN SHEDS TO BE RELOCATED
10. DEMOLISH, REMOVE, AND DISPOSE OF PORTABLE SCHOOL ROOM AND ADJACENT SHED
11. EXISTING SECURITY FENCE TO REMAIN. PROTECT FROM DEMOLITION.
12. ELECTRICAL MAIN SERVICE AND FIRE SUPPRESSION WATER SYSTEM.
13. SHED FOR GOATS. PROTECT OR MOVE IF POSSIBLE.
14. PROTECT EXISTING WATERLINE AND BACKFLOW PREVENTER.
15. GARDEN BEDS TO REMAIN. PROTECT FROM DAMAGE.
16. REMOVE POLE.
17. PROTECT EXISTING PAVEMENT FROM DAMAGE.
18. FIRE WATER LINE: CAP AND DISCONNECT BEYOND TEE TO FIRE HYDRANT

GENERAL NOTES:

A. PROTECT NEARBY TREES AND SHRUBS AND AVOID UNNECESSARY ROOT DISTURBANCE. VEGETATION AROUND BUILDING IS NOT DEPICTED ON THIS SHEET.

B. BUILDING AND UTILITY DIMENSIONS AND LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL CONFIRM ACTUAL LOCATIONS AND DIMENSIONS BEFORE STARTING DEMOLITION WORK.

BUILDING IS APPROXIMATELY 20,400 SF

LIMITS OF DEMOLITION

FACILITIES TO BE PRESERVED

PRELIMINARY
NOT FOR CONSTRUCTION

THIS DRAWING IS INTENDED TO BE FULL SCALE ON 22"x 34" PAPER, OR HALF SCALE ON 11"x 17" PAPER.

PROJECT ENGINEER: Shawn Jenkins, P.E., P.E.S. (530)-245-6810 sjenkins@co.shasta.ca.us

PRINCIPAL ENGINEER: Shawn Jenkins, P.E., P.E.S. (530)-245-6810 sjenkins@co.shasta.ca.us

STATE OF CALIFORNIA
COUNTY OF SHASTA
DEPARTMENT OF PUBLIC WORKS

DEMOLITION OF THE OLD JUVENILE JUSTICE CENTER

SCALE: NOT TO SCALE

SHEET: C2.01

MAP SOURCE: SHASTA COUNTY DEPT. OF PUBLIC WORKS

County of Shasta Dept. of Public Works
Old Juvenile Hall Justice Center Demolition
Redding, California

Demolition Site Plan
Proposed Mitigated Negative Declaration
September 2023 - 522019.104

Figure 2-4

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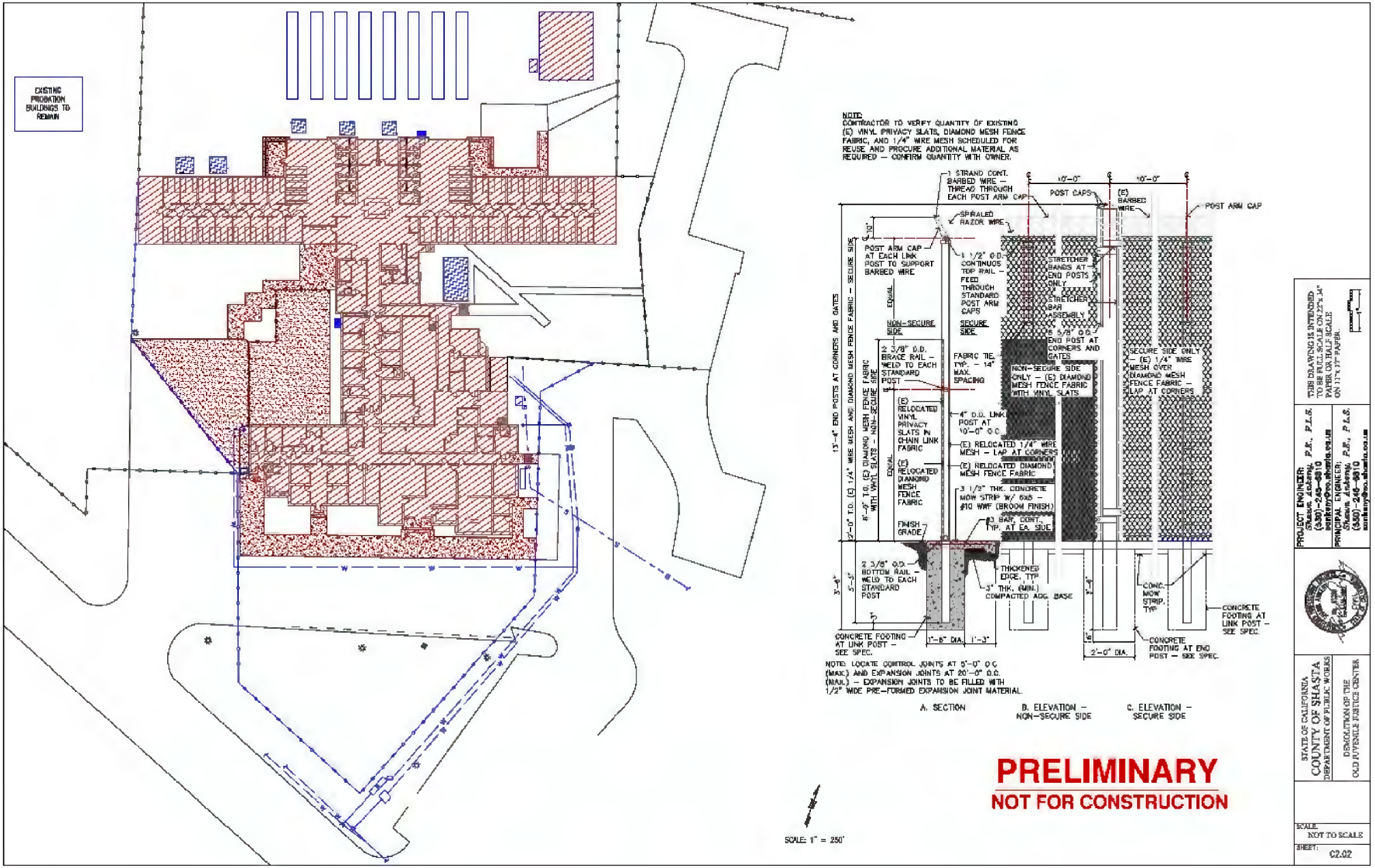

MAP SOURCE: SHASTA COUNTY DEPT. OF PUBLIC WORKS

County of Shasta Dept. of Public Works
Old Juvenile Hall Justice Center Demolition
Redding, California

Security Fence Plan
Proposed Mitigated Negative Declaration
September 2023 - 522019.104

Figure 2-5

Material Hauling

The County estimates that the project would generate approximately 15,400 cubic yards of construction waste over the approximately 15 to 20-day project timeline. The demolished material would be stockpiled onsite until enough material has been amassed to efficiently haul it offsite. Over the course of the project, the number of haul trips would be approximately 120 local haul trips. The West Central Landfill, approximately 10 miles west of the site, is available to accept demolition debris. Recycled materials, including concrete, asphalt and metal debris would be hauled to various local recycling sites. Most concrete and asphalt recycling sites are along Clear Creek Road. Hazardous materials, such as asbestos and lead abatement waste, would be hauled and disposed of at an appropriate Class I facility that accepts hazardous waste.

Demolition Equipment, Truck Trips and Personnel

All required demolition equipment and vehicles would access the site utilizing the existing driveway on Radio Lane. All construction equipment and worker vehicles for the proposed project would be staged within the boundary of the site.

Demolition activities would require the operation of various pieces of heavy equipment onsite, including approximately 2 excavators (with breaker attachments and bucket and thumb attachments), a loader and 1 to 2 dump trucks. The type and level of use of this equipment would vary across the phases of work, with an estimated daily peak of approximately 2 pieces of equipment occurring over a 15 to 20 day building demolition period of the proposed project. The peak number of daily offsite truck trips would be about 12 to 14 roundtrips for an approximately 15 to 20-day demolition period. These truck trips would generally be distributed throughout the workday, rather than concentrated during a particular portion of the day. The number of daily onsite personnel is anticipated to be 4 to 7. It was assumed that these personnel would each generate a vehicle trip inbound to the project site in the morning and a separate vehicle trip outbound from the project site in the afternoon.

Best Management Practices

Demolition activities, including debris stockpiling and debris offsite removal activities are required to meet Shasta County Code Chapter 18.10 and be conducted in accordance with the conditions set forth within Section E.10 “Construction Site Storm Water Runoff Control Program”, of the MS4 permit, the construction general permit and applicable county requirements. To minimize impacts from fugitive dust generation during the proposed demolition activities, the demolition contractor will be required to comply with Shasta County Air Quality Management District (SCAQMD) Rule 3-16 - Fugitive, Indirect, or Non-Traditional Sources. SCAQMD Rule 3-16 requires the implementation of Reasonably Available Control Measures (RACMs) to be implemented during earth-moving, construction, and demolition activities. For demolition activity, the minimum required RACMs include the use of wind breaks/screens and the application of dust suppressants.

Documentation and References

ACC (ACC Environmental Consultants) 2022. *Hazardous Materials Abatement Work Plan, Old Juvenile Justice Center, 2680 Radio Lane, Redding, CA*. January 2022.

COR (City of Redding). 2000. *City of Redding 2000 – 2020 General Plan*. October 3, 2000.

COR. 2023. *City of Redding Geographic Information System*. [Online]: https://gispub.cityofredding.org/reddingmap/. Accessed July 25, 2023.

Daly (Daly & Associates). 2023. *Historical Resource Evaluation of Old Shasta County Juvenile Justice Center, 2680 Radio Lane, Shasta County, California*. August 2023.

ENPLAN. 2010a. *Cultural Resources Inventory for the Shasta County Juvenile Hall Expansion Project on Radio Lane, Shasta County, California*. June 1, 2010.

ENPLAN. 2010b. *Biological Study and Wetland Screening For Expansion of Juvenile Hall Facility*. April 28, 2010.

Shasta (Shasta County). 2004. *Shasta County General Plan*. September 2004.

Shasta. 2023. *Shasta County Geographic Information System*. [Online]: https://maps.shastacounty.gov/ShastaCountyMap/ Accessed July 25, 2023.

Section 3 - Environmental Factors Potentially Affected

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

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

DETERMINATION: (To be completed by the Lead Agency)

On the basis of the initial evaluation:

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

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 MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

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

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

Copies of the Initial Study and related materials and documentation may be obtained at the Shasta County Department of Public Works, 1855 Placer Street, Redding, CA 96001. Contact Shawn Ankeny, Principal Engineer at (530) 245-6810.

Shawn Ankeny
Shasta County Department of Public Works

September 27, 2023
Date

Section 4 – Evaluation of Environmental Impacts

This section provides an evaluation of the potential environmental impacts of the proposed Old Juvenile Hall Justice Center Demolition project (proposed project) located in the City of Redding as well as the CEQA Mandatory Findings of Significance. A discussion of cumulative impacts is also included at the end of this chapter. The issue areas evaluated in this Initial Study include:

- Aesthetics
- Agricultural Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology & Soils
- Greenhouse Gas Emissions
- Hazards & Hazardous Materials
- Hydrology & Water Quality
- Land Use & Planning
- Mineral Resources
- Noise
- Population & Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities & Service Systems
- Wildfire

The environmental analysis in this section is patterned after the Initial Study Checklist recommended by the State CEQA Guidelines and used by the County in its environmental review process. For the preliminary environmental assessment undertaken as part of this Initial Study's preparation, a determination that there is a potential for significant effects indicates the need to more fully analyze the proposed project's impacts and identify mitigation.

For the evaluation of potential impacts, the questions in the Initial Study Checklist are stated and an answer is provided according to the analysis undertaken as part of the Initial Study. The analysis considers the long-term, direct, indirect, and cumulative impacts of the development. To each question, there are four possible responses:

- *No Impact.* The project will not have any measurable impact on the environment.
- *Less Than Significant Impact.* The project will have the potential for impacting the environment, although this impact will be below established thresholds that are considered to be significant.
- *Potentially Significant Impact Unless Mitigation Incorporated.* The project will have the potential to generate impacts which may be considered as a significant effect on the environment, although mitigation measures or changes to the development's physical or operational characteristics can reduce these impacts to levels that are less than significant.
- *Potentially Significant Impact.* The project will have impacts which are considered significant, and additional analysis is required to identify mitigation measures that could reduce these impacts to less than significant levels.

All answers must take into account the whole action involved, including potential off and onsite, indirect, direct, construction, and operation, except as provided for under State CEQA Guidelines Section 15183 and State CEQA Statute Section 21083. The setting discussion under each resource section in this chapter is followed by a discussion of impacts and applicable mitigation measures.

This Initial Study identifies several potentially significant environmental effects related to the proposed project. Some effects are mitigated by implementation of existing provisions of law and standards of practice related to environmental protection. Such provisions are considered in the environmental impact analysis, and the degree to which they would reduce potential environmental effects is discussed. Additional mitigation measures are specifically identified, when necessary, to avoid potential environmental effects or to reduce them to a level that is less than significant.

Format of the Environmental Analysis

Each topical section of this Initial Study is organized into the following subsections:

- *Environmental Setting*. The environmental settings present the existing environmental conditions, in accordance with CEQA Guidelines Section 15125. The subsection describes the baseline conditions against which the environmental impacts associated with the proposed project are assessed.

- *Regulatory Setting.* The regulatory settings describe the laws, regulations, and policies that affect the resource or the assessment of impacts on the specific resource. Where appropriate, the regulatory setting subsection establishes the regulatory framework for the analysis of each resource.

- *Impact Analysis.* The impact analysis presents thresholds of significance used and discusses potential effects of the proposed project on the existing environmental conditions (in accordance with CEQA Guidelines sections 15126.2(a) and 15143).

- *Mitigation Measures.* Mitigation measures provide measures to reduce potentially significant effects associated with the proposed project to the extent feasible (in accordance with CEQA Guidelines sections 15002(a)(3), 15021(a)(2), and 15091(a)(l)).

- *Findings.* This subsection is presented in accordance with CEQA Guidelines Section 15091(a)(1), 15092(b)(2)A), and 15126.2(b), which require identification of impacts capable of avoidance or mitigation, as well as those that cannot be avoided.

Section I - Aesthetics

This section of the Initial Study describes the existing visual environment in and around the project area. The analysis assesses the potential for aesthetics impacts using accepted methods of evaluating visual quality, as well as identifying the type and degree of change the proposed project would likely have on the character of the surrounding area.

Environmental Setting

The proposed project is situated in a developed area of west-central Redding west of the Sacramento River. Development within the vicinity includes a mix of County owned facilities, such as the Department of Probation and Shasta County Health and Human Services and residential uses south along Radio Lane. The County's operating juvenile facility is located immediately to the east of the project site.

The Old Juvenile Hall Justice Center was constructed circa 1953. Portable classrooms and maintenance sheds were completed after 1980. The site is relatively flat and is situated at approximately 480 feet above mean sea level and is occupied by the County's former juvenile hall facility, which consists of administrative buildings, paved parking areas for staff and visitors, inmate classrooms, a basketball court, a garden, and a grass field for recreation. Most of the project site has been previously developed or altered from its natural state. Numerous ornamental trees and shrubs have been planted around buildings, and turf grasses have become established in the former recreation areas.

Scenic Resources

Scenic vistas are defined as expansive views of highly-valued landscapes from publicly accessible viewpoints. Scenic vistas include views of natural features such as topography, water courses, outcrops, and natural vegetation, as well as man-made scenic structures. County has not designated specific scenic vistas in the immediate project area as a part of the General Plan (Shasta, 2004). In addition, the City has not identified scenic vistas within the project area.

According to Caltrans' California Scenic Highway Program and the National Scenic Byways Program, the proposed project is not located near a highway which has been listed as a State or federal Scenic Highway (Caltrans, 2023; FHWA, 2018).

Regulatory Setting

National Scenic Byways Program

The National Scenic Byways Program is part of the U.S. Department of Transportation, Federal Highway Administration (FHWA). Established in Title 23, Section 162 of the United Sates Code, the program is a grass-roots collaborative effort established to help recognize, preserve, and enhance selected roads throughout the United States. FHWA's May 18, 1995 interim policy sets forth the procedures for the designation by the U.S. Secretary of Transportation of certain roads as National Scenic Byways or All-American Roads based on their archaeological, cultural, historic, natural, recreational, and scenic qualities. There are 150 such designated byways in 46 states.

California Scenic Highway Program

California's Scenic Highway Program was created by the legislature in 1963. Its purpose is to protect and enhance the natural scenic beauty of California highways and adjacent corridors, through special conservation treatment. The State laws governing the Scenic Highway Program are found in the Streets and Highways Code, Sections 260 through 263. Caltrans has compiled a list of State highways that are designated as scenic and county highways that are eligible for designation as scenic.

Impact Analysis

The following includes an analysis of environmental parameters related to *Aesthetics* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur.

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

a) *Have a substantial adverse effect on a scenic vista?*

The County's General Plan identifies prominent natural or man-made features which immediately catch the eye, locations where the visual environment changes dramatically, and locations which mark the entrance to a community of geographic area as scenic assets. As previously mentioned above, the County nor the City has designated specific scenic vistas in the immediate project area as a part of their respective general plans. Therefore, the demolition activities would not have a substantial adverse effect on a scenic vista. No impact would occur in this regard.

b) *Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?*

Refer to previous impact discussion under I.a. As mentioned above under *the Environmental Setting*, there are no designated State or federal scenic highways or scenic highway corridors in the vicinity of the proposed project. Therefore, the demolition activities would not substantially damage any scenic resource within a State scenic highway. No impact would occur in this regard.

c) *In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that area 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?*

The project site is located in an urbanized area within the City of Redding. The project site is zoned "PF" (Public Facilities) (COR, 2023). There are no specific provisions relating to scenic quality applicable to the Public Facilities zone designation. As noted above, the project site is not located within a scenic vista or State scenic highway. The proposed project involves the demolition and removal of the former juvenile hall justice center and associated structures. No new onsite development is proposed at this time with the exception of installation of perimeter security fencing. Therefore, demolition activities would not conflict with applicable zoning or other regulations governing scenic quality. No impact would occur in this regard.

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

Existing sources of light or glare on or near the project site consists of parking lot lighting, safety and security lighting, streetlights, and interior and exterior building lights in the surrounding developed areas. The project involves the demolition and removal of the 21,275 square foot former Juvenile Justice Center building and associated infrastructure, and the associated concrete foundations and sidewalks, leaving vacant space within the property. The duration of the demolition activities would be approximately three weeks, and would take place 5 days per week, Monday through Friday, with typical working hours from 7:00 a.m. to 6:00 p.m. Therefore, demolition activities would occur during the day and would not require nighttime lighting. Additionally, the project does not involve the construction of new permanent structures that would create additional sources of light or glare. Therefore, demolition activities would not create new sources or intensify existing light trespass or glare onto adjoining properties. No impact would occur in this regard.

Mitigation Measures

No mitigation measures are required.

Findings

In the course of the above evaluation, impacts associated with *Aesthetics* were found to not be significant because of the inability of a project of this scope to create such impacts or the absence of project characteristics producing effects of this type.

Documentation and References

Caltrans (California Department of Transportation). 2023. *California State Scenic Highway System Map*. [Online]: https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa Accessed July 25, 2023.

COR (City of Redding). 2023. *City of Redding Geographic Information System*. [Online]: https://gispub.cityofredding.org/reddingmap/. Accessed July 25, 2023.

FHWA (Federal Highways Administration). 2018. *National Scenic Byways Program*. 2018. [Online]: https://www.fhwa.dot.gov/byways/states/CA. Accessed July 25, 2023.

National Wild and Scenic Rivers System. 2018. [Online]: https://www.rivers.gov/california.php. Accessed July 25, 2023.

Shasta (Shasta County). 2004. *Shasta County General Plan*. September 2004.

Shasta. 2023. *Shasta County Geographic Information System*. [Online]: https://maps.shastacounty.gov/ShastaCountyMap/. Accessed July 25, 2023.

Section II – Agricultural Resources

The purpose of this section of the Initial Study is to determine the extent to which the project contributes to the physical deterioration of agricultural resources. This section describes the agricultural resources within the project study area, and the applicable regulations that govern those resources.

Environmental Setting

The Department of Conservation (DOC) Farmland Mapping and Monitoring Program (FMMP) maps and classifies farmland. Classifications are based on a combination of physical and chemical characteristics of the soil and climate that determine the degree of suitability of the land for crop production. The project site does not contain designated farmland. The site is not located within an area of Prime Farmland as identified by the California Department of Conservation's Important Farmland Series Mapping and Monitoring Program (DOC, 2017; DOC, 2018).

According to the U.S. Department of Agriculture, Natural Resources Conservation Service, two soil units occur in the study area: Honcut gravelly loam and Tehama loam, 0 to 3 percent slopes (NRCS, 2023).

The California Land Conservation Act of 1965, commonly known as the Williamson Act, allows local governments to form contracts with private landowners to restrict specific parcels of land to agricultural or open space use. The area involving the proposed project is not under an active Williamson Act contract. Additionally, no timberlands or forest land are present within the project site.

Regulatory Setting

This section summarizes current federal, State, and local regulations relevant to the review of *Agricultural Resources* for this project. Ordinances, regulations, or standards that are applicable to the environmental review of agricultural resource impacts include the following:

California Farmland Mapping and Monitoring Program

The California Farmland Mapping and Monitoring Program (FMMP), which monitors the conversion of the State's farmland to and from agricultural use, relies on information from the NRCS soils surveys, NRCS land inventory and monitoring criteria, and land use and water availability. Topography, climate, soil quality, and available irrigation water all factor into the FMMP farmland classifications. The FMMP was established by the California DOC, under the Division of Land Resource Protection. Important Farmland Maps are compiled by the FMMP pursuant to Section 65570 of the California Government Code. The FMMP is an informational service only and does not constitute State regulation of local land use decisions. Under the FMMP, "Important Farmland Categories" were established based on soils characteristics that have significant agricultural production values.

California Land Conservation Act

The California Land Conservation Act of 1965, commonly referred to as the Williamson Act, is promulgated in California Government Code Section 51200-51297.4. The Williamson Act enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space uses in return for reduced property tax assessments. Private land within locally designated agricultural preserve areas is eligible for enrollment under Williamson Act contracts.

Farmland Security Zone Contract

The DOC passed the Farmland Security Zone legislation (Govt. Code Section 51296) in 1998. The Farmland Security Zone allows counties to establish an additional program for farmlands to enter into contracts with the State. This legislation allows landowners whose land is under a Williamson Act contract to petition to the county board of supervisors to annul

the Williamson Act contract for a Farmland Security Zone Contract. A Farmland Security Zone Contract is a 20-year contract that allows the property owner to receive 35 percent more in tax savings than a Williamson Act contract. Both of these contracts require that lands be within an established Agricultural Preserve. Agricultural lands that are not in a preserve face the greatest threat of conversion, as they are assessed higher property taxes due to their proximity to urbanization.

Forest Land and Timberland

Public Resources Code Section 12220(g) defines Forest Land as *"land that can support 10% native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits."* Public Resources Code Section 4526 defines timberland as *"land, other than land owned by the federal government, which is available for, and capable of, growing a crop of trees of any commercial species used to produce lumber and other forest products, including Christmas trees."* Government Code Section 51104(g) defines Timberland Production Zone (TPZ) as *"an area which has been zoned pursuant to [Government Code] Section 51112 or 51113 and is devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses, as defined in subdivision (h)."*

Impact Analysis

The following includes an analysis of environmental parameters related to *Agricultural Resources* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur.

Would the Project:	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				**X**
b) Conflict with existing zoning for agricultural use, or a Williamson Act Contract?				**X**
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 5110(g))?				**X**
d) Result in the loss of forest land or conversion of forest land to non-forest use?				**X**
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest land?				**X**

a) *Convert Prime Farmland, Unique Farmland, or 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?*

The project site has not been historically used for agricultural purposes, nor does it possess soils that are prime for agricultural production. The site is not located within an area of Prime Farmland as identified by the California Department of Conservation's Important Farmland Series Mapping and Monitoring Program (DOC, 2023). The subject property is not identified as Prime Farmland, Unique Farmland, or Statewide Importance on the map titled Shasta County Important Farmland 2016. Therefore, demolition activities would not convert prime farmland, unique farmland, or farmland of statewide importance to nonagricultural use. No impact would occur in this regard.

b) *Conflict with existing zoning for agricultural use, or a Williamson Act Contract?*

The proposed project nor its surrounding lands are currently under a Williamson Act contract. In addition, the proposed project site is not under a Farmland Security Zone contract or within an agricultural preserve. Therefore, demolition activities would not result in conflicts with existing agricultural zoning. No impact would occur in this regard.

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 5110(g))?*

The proposed project would not 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)). The project site is not forest land, timberland, or zone Timberland Production. Therefore, demolition activities would not conflict with existing zoning or cause rezoning and would have no impact on timberlands zoned as Timber Production. No impact would occur in this regard.

d) *Result in the loss of forest land or conversion of forest land to non-forest use?*

The proposed project is not located within existing forest land. Therefore, demolition activities would not result in the loss of forest land or conversion of forest land to non-forest use. No impact would occur in this regard.

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 land?*

The proposed project would not result in the loss of forest land or conversion of forest land to non-forest use, as the project site is not located on forest land. In addition, demolition activities would not occur in an area of significant agricultural soils. No impact would occur in this regard.

Mitigation Measures

No mitigation measures are required.

Findings

In the course of the above evaluation, impacts associated with *Agricultural Resources* were found to not be significant because of the inability of a project of this scope to create such impacts or the absence of project characteristics producing effects of this type.

Documentation and References

DOC (California Department of Conservation). 2023. *Farmland Mapping and Monitoring Program*. [Online]: https://maps.conservation.ca.gov/DLRP/CIFF/. Accessed July 25, 2023.

DOC. 2018. *Farmland of Local Importance*. [Online]: https://www.conservation.ca.gov/dlrp/fmmp/Documents/Farmland_of_Local_Importance_2018.pdf. Accessed July 25, 2023.

DOC. 2017. *Shasta County Important Farmland 2016*. December 2017.
NRCS (Natural Resources Conservation Service). 2023. *Web Soil Survey-Soil Map*. [Online]: https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx Accessed July 25, 2023.
Shasta (Shasta County). 2004. *Shasta County General Plan*. September 2004.
Shasta. 2023. *Shasta County Geographic Information System*. [Online]: https://maps.shastacounty.gov/ShastaCountyMap/. Accessed July 25, 2023.

III. Air Quality

This section examines the air quality in the project area, includes a summary of applicable air quality regulations, and analyzes potential air quality impacts associated with the proposed project. Air quality impacts were assessed in accordance with methodologies recommended by the US Environmental Protection Agency (EPA), California Air Resources Board (CARB), and the Shasta County Air Quality Management District (SCAQMD). Where quantification was required, emissions were modeled using the California Emissions Estimator Model (CalEEMod).

Environmental Setting

The proposed project is located within the City of Redding at the northern area of the Northern Sacramento Valley Air Basin (NSVAB). The NSVAB consists of a total of seven counties: Sutter, Yuba, Colusa, Butte, Glenn, Tehama, and Shasta. The NSVAB is bounded on the north and west by the Coastal Mountain Range and on the east by the southern portion of the Cascade Mountain Range and the northern portion of the Sierra Nevada range. These mountain ranges reach heights in excess of 6,000 feet above mean sea level, with individual peaks rising much higher. The mountains form a substantial physical barrier to locally created pollution as well as pollution transported northward on prevailing winds from the Sacramento metropolitan area.

The environmental conditions of Shasta County are conducive to potentially adverse air quality conditions. The basin area traps pollutants between two mountain ranges to the east and the west. This problem is exacerbated by a temperature inversion layer that traps air at lower levels below an overlying layer of warmer air. Prevailing winds in the area are from the south and southwest. Sea breezes flow over the San Francisco Bay Area and into the Sacramento Valley, transporting pollutants from the large urban areas. Growth and urbanization in Shasta County have also contributed to an increase in emissions.

Shasta County, including the far northern Sacramento Valley, currently exceeds the State's ambient standards for ozone (smog) (CARB, 2022). Consequently, this pollutant is the focus of local air quality policy, especially when related to land use and transportation planning. Even with application of measures to reduce emissions for individual projects, cumulative impacts are unavoidable when ozone emissions are involved. For example, the primary source of emissions contributing to ozone is from vehicles. Any project that generates vehicle trips has the potential of contributing incrementally to the problem.

Sensitive receptors (for example, children, senior citizens, and acutely or chronically ill people) are more susceptible to the effect of air pollution than the general population. Land uses that are considered sensitive receptors typically include residences, schools, parks, childcare centers, hospitals, and retirement homes. Sensitive receptors near the project site include residences to the south (closest residence approximately 150 feet to the south) and the new Juvenile Rehabilitation Facility directly to the east.

Regulatory Setting

This section summarizes current federal, State, and local regulations relevant to the review of *Air Quality* for this project. Ordinances, regulations, or standards that are applicable to the environmental review of air quality impacts include the following:

Ambient Air Quality Standards

The federal Clean Air Act of 1971 and the Clean Air Act Amendments (1977) established the national ambient air quality standards (NAAQS), which are promulgated by the U.S. Environmental Protection Agency (EPA). The State of California has also adopted its own California ambient air quality standards (CAAQS), which are promulgated by CARB. Implementation of the project would occur in the Shasta County portion of the NSVAB, which is under the air quality regulatory jurisdiction of the SCAQMD and is subject to the rules and regulations adopted by the air district to achieve the NAAQS and CAAQS.

Shasta County Air Pollution Control District

The SCAQMD is designated by law to adopt and enforce regulations to achieve and maintain ambient air quality standards. The SCAQMD, along with other air districts in the Northern Sacramento Valley Air Basin (NSVAB), has committed to jointly prepare the NSVAB Air Quality Attainment Plan for the purpose of achieving and maintaining healthful air quality throughout the air basin. In addition, the SCAQMD adopts and enforces controls on stationary sources of air pollutants through its permit and inspection programs, and it regulates agricultural burning. Other responsibilities include monitoring air quality, preparing clean air plans, and responding to citizen complaints concerning air quality. All projects in Shasta County are subject to applicable SCAQMD rules and regulations in effect at the time of construction and operation. Descriptions of specific rules applicable to the proposed project may include, but are not limited to:

- SCAQMD Rule 2-1, New Source Review, establishes pre-construction review requirements for new and modified stationary sources of air pollution for use of Best Available Control Technology (BACT), analysis of air quality impacts, and to ensure that the operation of such sources does not interfere with the attainment or maintenance of ambient air quality standards.

- SCAQMD Rule 3-16, Fugitive, Indirect, or Non-Traditional Sources, controls the emission of fugitive dust during earth-moving, construction, demolition, bulk storage, and conditions resulting in wind erosion.

Shasta County General Plan

The Shasta County General Plan, as amended through September 2004, provides the following air quality objectives and policies relative to the proposed project:

- *AQ-1.* To protect and improve the County's air quality in accordance with Federal and State clean air laws in order to: (1) safeguard human health, and (2) minimize crop, plant, and property damage.

- *AQ-2c.* Land use decisions, where feasible, should contribute to the improvement of air quality. New projects shall be required to reduce their respective air quality impacts to below levels of significance or proceed as indicated in Policy AQ-2e.

- *AQ-2d.* Shasta County shall ensure that air quality impacts identified during CEQA review are: (1) consistently and fairly mitigated, and (2) mitigation measures are feasible.

- *AQ-2e.* Shasta County will cooperate with the AQMD in assuring that new projects with stationary sources of emissions of non-attainment pollutants or their precursors that exceed 25 tons per year shall provide appropriate emission offsets. A comparable program which offsets indirect emissions of these pollutants exceeding 25 tons per year from development projects shall also be utilized to mitigate air pollution impacts. An Environmental Impact Report will be required for all projects that have unmitigated emissions of non-attainment pollutants exceeding 25 tons per year.

- *AQ-2g.* Significance thresholds as proposed by the AQMD for emissions shall be utilized when appropriate for: (1) Reactive Organic Gases (ROG) and Oxides of Nitrogen (NOx), both of which are precursors of ozone, and (2) inhalable particulate matter (PM10) in determining mitigation of air quality impacts.

Impact Analysis

The significance of potential impacts was determined based on State CEQA Guidelines, Appendix G, and the Shasta County Air Quality Management District's (SCAQMD's) *Protocol for Review, Land Use Permitting Activities, Procedures for Implementing the California Environmental Quality Act*.[1] The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than

significant impacts, or less than significant impacts with mitigation could occur. This section analyzes the short-term air quality impacts associated with the proposed demolition activities. Once demolition activities are complete there is no potential for the project to result in operational emissions of criteria air pollutants.

The air quality analysis includes a review of criteria pollutant[2] emissions such as carbon monoxide (CO)[3], nitrogen oxides (NO_x)[4], volatile organic compounds (VOC) as reactive organic gases (ROG)[5], particulate matter less than 10 micrometers (coarse or PM_{10}), and particulate matter less than 2.5 micrometers (fine or $PM_{2.5}$).[6] For the purposes of assessing air quality impacts in CEQA documents, SCAQMD Rule 2-1 – New Source Review, which contains thresholds for operational emissions from new stationary sources, is commonly used as a significance threshold for project-level review for land use projects. Although these stationary source emissions thresholds do not directly apply to land use projects, they provide a reference point for levels of emissions that would trigger SCAQMD requirements for best available control technology and/or mitigation off-sets. Per Rule 2-1, criteria air pollutants from the operation of stationary sources are considered significant if they exceed the following thresholds listed in Table 4-1, SCAQMD SIGNIFICANCE THRESHOLDS (SCAQMD, 1993).

Table 4-1
SCAQMD SIGNIFICANCE THRESHOLDS

Pollutant	Significance Thresholds[1] (pounds per day)
Reactive Organic Compounds	25
Nitrogen Oxides	25
Carbon Monoxide	500
Sulfur Oxides	80
Particulate Matter (PM10)	80
[1] SCAQMD, 1993.	

In using SCAQMD Rule 2-1 as a threshold in this document, the Lead Agency is exercising its discretion to formulate CEQA significance criteria based in part on the SCAQMD rules, as they reflect the best available expert judgment regarding what constitutes significant levels of air pollution within the NSVAB and Shasta County.

Would the Project:	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?			X	

[2] Criteria air pollutants refer to those air pollutants for which the USEPA and CARB has established National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) under the Federal Clean Air Act (CAA).

[3] CO is a non–reactive pollutant that is a product of incomplete combustion of organic material, and is mostly associated with motor vehicle traffic, and in wintertime, with wood–burning stoves and fireplaces.

[4] When combustion temperatures are extremely high, as in aircraft, truck and automobile engines, atmospheric nitrogen combines with oxygen to form various oxides of nitrogen (NOx). Nitric oxide (NO) and NO_2 are the most significant air pollutants generally referred to as NOx. Nitric oxide is a colorless and odorless gas that is relatively harmless to humans, quickly converts to NO_2 and can be measured. Nitrogen dioxide has been found to be a lung irritant capable of producing pulmonary edema.

[5] VOC means any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions and thus, a precursor of ozone formation. ROG are any reactive compounds of carbon, excluding methane, CO, CO_2 carbonic acid, metallic carbides or carbonates, ammonium carbonate, and other exempt compounds. The terms VOC and ROG are often used interchangeably.

[6] PM10 and PM2.5 consists of airborne particles that measure 10 microns or less in diameter and 2.5 microns or less in diameter, respectively. PM10 and PM2.5 represent fractions of particulate matter that can be inhaled into the air passages and the lungs, causing adverse health effects.

[6] Shasta County Air Quality Management District, *Protocol for Review, Land Use Permitting Activities, Procedures for Implementing the California Environmental Quality Act*, November 2003, https://www.co.shasta.ca.us/docs/libraries/resource-management-docs/aq-docs/scaqmd-ceqa-land-use-protocol.pdf

Would the Project:	Potentially Significant Impact	Less-Than-Significant 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.			X	
c) Expose sensitive receptors to substantial pollutant concentrations?		X		
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X	

a) *Conflict with or obstruct implementation of the applicable air quality plan?*

The proposed project would not conflict with or obstruct implementation of the 2021 NSVPA Air Quality Attainment Plan or any other applicable air quality plan. The 2021 NSVPA Air Quality Attainment Plan designates Shasta County as an area of nonattainment with respect to the California Ambient Air Quality Standard for ozone (of which VOC and NO_x are precursors to its formation along with sunlight).

As described throughout this document, implementation of the proposed project would occur over a period of approximately three weeks and would include the abatement, demolition, removal, and disposal of a former juvenile hall facility. The project must comply with various regulatory measures including SCAQMD Rule 3-16, which requires the implementation of Reasonable Available Control Measures (RACMs) during construction and demolition activity (SCAQMD, 2007). Once demolition activities are complete there is no potential for the project to generate operational air quality impacts. Due to the short duration of project construction activities, project design elements, and required regulatory measures, the project would not exceed SCAQMD significant thresholds (see Section III.b) and conflict with or obstruct implementation of the NSVPA Air Quality Attainment Plan. Impacts are considered less than significant in this regard.

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.*

As discussed in the *Environmental Setting*, the project is located in Shasta County, which is located in the NSVAB and is subject to the jurisdiction of the SCAQMD. The SCAQMD's primary responsibility is to achieve and maintain federal and State air quality standards, subject to the powers and duties of the CARB. Shasta County, including the far northern Sacramento Valley, currently exceeds the State's ambient standards for ozone (smog) (CARB, 2022).

The proposed project has the potential to generate the emissions of particulate matter and ozone precursors (Reactive Organic Gases [ROG] and Oxides of Nitrogen [NO_x]) during the proposed demolition activities. During demolition activities, emissions would primarily be generated from fugitive dust from ground-disturbing activities and vehicle/equipment exhaust. Once demolition activities are complete there is no potential for the project to result in operational emissions of criteria air pollutants.

Construction emissions for the proposed project were estimated using the California Emissions Estimator Model (CalEEMod), which is a statewide land use emissions computer model designed to provide a uniform platform for government agencies to quantify potential criteria pollutant emissions associated with both construction and operation of a variety of land use projects (CAPCOA, 2020). The model applies inherent default values for various land uses, including trip generation rates based on the Institute of Transportation Engineers (ITE) Manual, vehicle mix, trip length, average speed, etc. However, where project-specific data is available, such data should be input into the model. Project-specific information from Section 2.0, PROJECT DESCRIPTION, where available, was input into the model. Otherwise, where project-specific information was not available, the model default values were used for estimating emissions from the proposed project.

Table 4-2
MAXIMUM DAILY CONSTRUCTION EMISSIONS (UNMITIGATED)

Criteria Pollutants	Emissions (pounds per day)					
	ROG	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Maximum Daily Emissions[1]	1.7	18.0	17.5	<0.1	9.2	4.4
Significance Threshold[2]	25	25	500	80	80	NA
Exceeds Significance Threshold?	No	No	No	No	No	No

1. CAPCOA, 2022.
2. SCAQMD, 1993.

As indicated in Table 4-2, the maximum daily construction emissions (unmitigated) from the proposed project would be below the SCAQMD Rule 2-1 significance thresholds. As such, the proposed project is not anticipated to result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment. Impacts are considered less than significant in this regard.

c) *Expose sensitive receptors to substantial pollutant concentrations?*

High concentrations of criteria air pollutants and toxic air contaminants can result in adverse health effects to humans. Sensitive receptors (for example, children, senior citizens, and acutely or chronically ill people) are more susceptible to the effect of air pollution than the general population. Land uses that are considered sensitive receptors typically include residences, schools, parks, childcare centers, hospitals, and retirement homes. Sensitive receptors near the project site include residences to the south (closest residence approximately 150 feet to the south) and the new juvenile rehabilitation facility directly to the east.

Demolition Activities

This discussion addresses whether the proposed demolition activities would expose sensitive receptors to substantial concentrations of asbestos, fugitive dust (PM_{10} and $PM_{2.5}$), and diesel particulate matter (diesel PM).

Asbestos

The USGS has published mapping identifying areas that are known to contain naturally occurring asbestos (NOA) (USGS, 2011). The mapping indicates that there are several locations within western Shasta County that are known to contain NOA. The project site is located in the City of Redding between the Sacramento River and SR-273 and is not identified as being in close proximity to areas that contain NOA. The closest areas known to contain NOA are located in the southwestern portion of the County over 15 miles to the southwest of the project site (USGS, 2011). As such, the project site is not known to contain NOA that could be released during the proposed demolition activities.

The proposed project includes the removal and disposal of asbestos-containing floor tile and mastic, drywall and joint compound, ceramic tile underlayment roof mastic, roofing and lead waste. Demolition activities will follow procedures contained in the Hazardous Materials Abatement Work Plan prepared for the project (ACC, 2022) (see Attachment F). All waste generated from abatement activities will be disposed of according to all local, State, and Federal regulations. In addition, the demolition contractor will be required to obtain daily down-wind and/or indoor air samples to ensure the risk of exposure to airborne asbestos is minimized. The proposed abatement crew will consist of approximately 8 to 12 individuals for a duration of approximately 2 weeks. To reduce impacts from the potential airborne release of asbestos containing materials during the proposed demolition activity, Mitigation Measure AQ-1 has been included for the project requiring implementation of the Hazardous Materials Abatement Work Plan prepared for the project. In compliance with Mitigation Measure AQ-1 and existing regulatory requirements, the proposed asbestos remediation activities would not expose sensitive receptors to substantial pollutant concentrations.

Fugitive Dust

Fugitive dust has the potential to be generated during the proposed demolition activities. As discussed in the analysis under impact discussion III.b above, the proposed project would not exceed the SCAQMD significance thresholds for particulate matter (for example, PM_{10}). However, fugitive dust from construction activity can still result in nuisances and localized health impacts. Fugitive dust emissions would vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. Fugitive dust emissions would also depend on soil moisture, silt content of soil, wind speed, and the amount of equipment operating.

To minimize impacts from fugitive dust generation during the proposed demolition activities, the demolition contractor will be required to comply with SCAQMD Rule 3-16 - Fugitive, Indirect, or Non-Traditional Sources. SCAQMD Rule 3-16 requires the implementation of Reasonably Available Control Measures (RACMs) to be implemented during earth-moving, construction, and demolition activities. For demolition activity, the minimum required RACMs include the use of wind breaks/screens and the application of dust suppressants. To reduce fugitive dust generation during the proposed demolition activity, compliance with Rule 3-16 has been included as Mitigation Measure AQ-2 for the proposed project. Due to the temporary nature of the proposed demolition activity and the incorporation of Mitigation Measure AQ-2, implementation of the proposed project would not expose sensitive receptors to substantial fugitive dust concentrations.

Diesel Particulate Matter (diesel PM)

The use of diesel-powered equipment during the proposed demolition activity would generate diesel particulate matter (diesel PM), which is a known carcinogen. Due to the limited scale and duration of demolition activities, and the rapid dissipation of diesel PM with distance, it is not anticipated that nearby sensitive receptors would be exposed to substantial diesel PM concentrations. Based on the emissions modeling conducted for the project, maximum daily emissions of diesel PM (modeled by $PM_{2.5}$, which is conservatively considered a surrogate for diesel PM), would not exceed 5 pounds per day (CAPCOA, 2022). This is well below the SCAQMD significance threshold of 80 pounds per day for particulate matter (SCAQMD, 1993).

The proposed demolition activity would occur for approximately three weeks. Residents and other sensitive receptors located within the vicinity of the project site would be exposed to construction contaminants only for the duration of demolition activity. This brief exposure period would substantially limit exposure to hazardous emissions. Therefore, it is not anticipated that the proposed project's construction activity would expose sensitive receptors to substantial diesel PM concentrations.

Conclusion

The demolition activities proposed by the project, as mitigated and in compliance with regulatory requirements, would not expose sensitive receptors to substantial pollutant concentrations. Therefore, the proposed project would result in a less than significant impact with mitigation incorporated on this resource category.

d) *Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?*

The potential for the project to generate emissions of criteria air pollutants and TACs is addressed under impact discussions III.a – iii.c above. Some of the emissions that would be generated during the proposed demolition activity also have the potential to generate odors. The discussion below analyzes whether the potential odors from the proposed project would adversely affect a substantial number of people.

Demolition Activities

Due to the subjective nature of odor impacts, the number of variables that can influence the potential for an odor impact, and the variety of odor sources, there are no quantitative or formulaic methodologies to determine the presence of a significant odor impact. Rather, often air districts recommend that odor analyses strive to fully disclose all pertinent

information. The intensity of an odor source's operations and its proximity to sensitive receptors influences the potential significance of odor emissions.

During the proposed demolition activity, there is the potential for the generation of objectionable odors in the form of equipment/vehicle exhaust in the immediate vicinity of the proposed activity. Based on the limited duration of the proposed demolition activity (approximately three weeks) and the rapid dispersal of these emissions with distance, it is not anticipated the potential odors would adversely affect a substantial number of people. Therefore, the proposed project would result in a less than significant impact on this resource category.

Mitigation Measures

The following mitigation measures have been developed to reduce potential impacts related to *Air Quality* to less than significant levels:

Mitigation Measure AQ-1

The demolition contractor shall be responsible for implementing the Hazardous Materials Abatement Work Plan prepared for the project (ACC, 2022; see Attachment F) to reduce the potential for the airborne release of asbestos containing materials during the proposed demolition activities.

Mitigation Measure AQ-2

The demolition contractor shall be responsible for implementing the applicable Reasonably Available Control Measures (RACMs) in Shasta County AQMD Rule 3-16 to reduce potential fugitive dust generation during the proposed demolition activities. For demolition activity, the minimum required RACMs include the use of wind breaks/screens and the application of dust suppressants.

Findings

Based upon the review of the information above, with implementation of mitigation measures the proposed project will have a less than significant impact with respect to *Air Quality*.

Documentation and References

ACC (ACC Environmental Consultants). 2022. *Hazardous Materials Abatement Workplan, Old Juvenile Justice Center, 2680 Radio Lane, Redding, CA*. January.

CAPCOA (California Air Pollution Control Officer's Association). 2022. *California Emission Estimator Model (CalEEMod). Version 2022.1.1.6*. Model Run on 8/8/23. [Online]: https://www.caleemod.com/. Accessed August 15, 2023.

CARB (California Air Resources Board). 2022. *Maps of State and Federal Area Designations*. [Online]: https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations. Accessed August 15, 2023.

SCAQMD (Shasta County Air Quality Management District). 1993. *SCAQMD Rules, Rule 2.1 – New Source Review*. [Online]: https://ww2.arb.ca.gov/current-air-district-rules.

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SVAQEEP (Sacramento Valley Air Quality Engineering and Enforcement Professionals). 2021. Northern Sacramento Valley Planning Area, Triennial Air Quality Attainment Plan, Executive Summary. [Online]: https://www.shastacounty.gov/sites/default/files/fileattachments/air_quality/page/2410/2021_nsvaq_attainment_plan.pdf. Accessed August 15, 2023.

Shasta (Shasta County). 2004. *Shasta County General Plan*. September 2004.

USGS (U.S. Geological Survey). 2011. *Reported Historic Asbestos Mines, Historic Asbestos Prospects, and Other Natural Occurrences of Asbestos in California*. [Online]: https://pubs.er.usgs.gov/publication/ofr20111188. Accessed August 15, 2023.

IV. Biological Resources

The purpose of this section of the Initial Study is to determine the extent to which the project contributes to the physical deterioration of biological resources. This section describes the biological resources within the project study area, and the applicable regulations that govern those resources.

Environmental Setting

The proposed project is situated in a developed area of west-central Redding west of the Sacramento River. Development within the vicinity includes a mix of County owned facilities, such as the Department of Probation and Shasta County Health and Human Services and residential uses south along Radio Lane.

The former Juvenile Hall Justice Center facility was constructed circa 1953. Portable classrooms and maintenance sheds were completed after 1980 (ENPLAN, 2010a). The site is relatively flat and is situated at approximately 480 feet above mean sea level and is occupied by the County's former Juvenile Hall Justice Center facility, which consists of administrative buildings, paved parking areas for staff and visitors, inmate classrooms, a basketball court, a garden, and a grass field for recreation. Most of the project site has been previously developed or altered from its natural state. Numerous ornamental trees and shrubs have been planted around buildings, and turf grasses have become established in the former recreation areas.

Oregon Gulch, historically a seasonal tributary of the Sacramento River, but now sustained in summer by irrigation leakage from the Anderson-Cottonwood Irrigation District (ACID) canal and urban runoff, flows eastward across the northern portion of the project area. Oregon Gulch drains the foothills west of the City of Redding. The stream has been heavily impacted by human activities, including residential and commercial development along its banks, bank degradation from off-highway vehicles, and illegal dumping of trash. Riparian vegetation along the lower reaches adjacent to the project site is well developed. In the study area, the canopy along Oregon Gulch consists primarily of valley oak, interior live oak, oracle oak, and willows; the shrub layer includes Himalayan blackberry, blue elderberry, and California grape (ENPLAN, 2010b).

Regulatory Setting

This section summarizes current federal, State, and local regulations relevant to the review of *Biological Resources* for this project. Regulations that are applicable to the environmental review of biological resource impacts include the following:

Wetlands and Waters

The United States Army Corps of Engineers (USACE) has primary federal responsibility for administering regulations that concern waters of the U.S. (including wetlands). Section 404 of the Clean Water Act (CWA), regulates the discharge of dredged or fill material into waters of the U.S. The USACE requires that a permit be obtained prior to the placement of structures within, over, or under navigable waters and/or discharges dredged or fill material into waters below the ordinary high-water mark (OHWM). The USACE has established a series of nationwide permits (NWP) that authorize certain activities in waters of the U.S. Under CWA Section 401, a project requiring a USACE Section 404 permit is also required to obtain a State Water Quality Certification (or waiver) to ensure that the project will not violate established State water quality standards. The RWQCB regulates waters of the State and has a policy of no-net-loss of wetlands. The Regional Water Quality Control Board (RWQCB) typically requires mitigation for all impacts to wetlands before it will issue a water quality certification.

Federal Endangered Species Act

The U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) implement the federal Endangered Species Act (FESA) of 1973. Under FESA, threatened and endangered species on the federal list and their

habitats are protected from "take" unless a Section 10 Permit is granted to an individual or a Section 7 consultation and a Biological Opinion with incidental take provisions are rendered from the lead federal agency. Under FESA, habitat loss is considered to be an impact to the species. Under Section 7 of the FESA, all federal agencies (including the USFWS and NMFS) are required to ensure that any action they authorize, fund, or carry out will not likely jeopardize the continued existence of federally listed species or result in the destruction or adverse modification of critical habitat.

Federal Migratory Bird Treaty Act

Most bird species, (especially those that are breeding, migrating, or of limited distribution) are protected under federal and/or State regulations. Under the Migratory Bird Treaty Act (MBTA) of 1918, migratory bird species, their nests, and their eggs are protected from injury or death, and any project-related disturbances during the nesting period.

Federal Magnuson-Stevens Fishery Conservation and Management Act

The Magnuson-Stevens Fishery Conservation and Management Act, also known as the Sustainable Fisheries Act (Public Law 104-297), requires that all federal agencies consult with NMFS on projects authorized, funded, or undertaken by that agency that may adversely affect Essential Fish Habitat of commercially managed marine and anadromous fish species.

Federal Bald and Golden Eagle Protection Act

This Act provides for the protection of the bald eagle and the golden eagle by prohibiting, except under certain specified conditions, the taking, possession, and commerce of such birds and their occupied and unoccupied nests.

California Fish and Game Code §1600-1616 (Streambed Alteration)

California Fish and Game Code §1600 *et seq.*, requires that a project proponent notify the California Department of Fish and Wildlife (CDFW) prior to any work that would divert or obstruct the natural flow of any river, stream, or lake; change the bed, channel, or bank of any river, stream, or lake; use material from any river, stream, or lake; and/or deposit or dispose of material into any river, stream, or lake. The project proponent and the CDFW must enter into a Streambed Alteration Agreement (SAA) prior to an action that would result in such an impact. The SAA will include conditions that minimize/avoid potentially significant adverse impacts to riparian habitat and waters of the state.

California Fish and Game Code §3503 and 3503.5 (Nesting Bird Protections)

These sections of the Code provide regulatory protection to resident and migratory birds and all birds of prey within the State and make it unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by the Code.

California Endangered Species Act

The California Endangered Species Act (CESA) prohibits the take of State-listed threatened and endangered species. Under CESA, state agencies are required to consult with the CDFW when preparing CEQA documents. The CDFW can authorize take if an incidental take permit is issued by the Secretary of the Interior in compliance with the FESA, or if the director of the CDFW issues a permit under §2080 in those cases where it is demonstrated that the impacts are minimized and mitigated.

California Native Plant Protection Act

The California Native Plant Protection Act (NPPA) (California Fish and Game Code §1900 – 1913) includes measures to preserve, protect, and enhance rare and endangered native plants. The list of native plants afforded protection pursuant to the Native Plant Protection Act includes those listed as rare and endangered under the CESA. The NPPA states that no

person will take, possess, sell, or import into the State any rare or endangered native plant, except in compliance with provisions of the act.

Impact Analysis

The following includes an analysis of environmental parameters related to *Biological Resources* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur.

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

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

The County proposes to abatement, demolition, remove, and dispose of the former 21,275 square foot, 56-bed Juvenile Hall Justice Center facility. Upon the completion of demolition and cleanup activities, a new security chain link fence will be installed around the perimeter of the property. No onsite development is proposed at this time; however, the existing garden will continue to be maintained and utilized by the Department of Probation.

Chinook Salmon and Central Valley Steelhead

Within the study area, Oregon Gulch is bordered by dense riparian vegetation along its banks and has suitable spawning habitat for salmonids. Chinook salmon and Central Valley steelhead are known to utilize this stream reach for spawning and/or rearing. Critical habitat is designated for Central Valley steelhead in Oregon Gulch from its confluence with the Sacramento River to ¾-mile upstream and includes the stream reach within the study area. No work is proposed in the bed and/or banks of Oregon Gulch. Indirect effects to Chinook salmon and Central Valley steelhead could potentially

occur if sediment-laden storm water runoff from the site enters Oregon Gulch and degrades spawning or rearing habitat downstream. Indirect impacts can be avoided through restricting onsite demolition activities to the dry season and implementing Best Management Practices (BMPs) for erosion control. As discussed in Section X, HYDROLOGY AND WATER QUALITY, all demolition related activities, including debris stockpiling and debris offsite removal activities are required to meet Shasta County Code Chapter 18.10 and be conducted in accordance with the conditions set forth within Section E.10 "Construction Site Storm Water Runoff Control Program", of the MS4 permit, the construction general permit and applicable County requirements. Impacts are considered to be less than significant.

Nesting Birds

For security purposes, three ornamental trees are anticipated to be removed near the new security fence and existing trees immediately adjacent to the facility may need to be pruned to allow equipment access. The County anticipates pruning and removing of trees prior to demolition activities and before the bird nesting period. Prior to the initiation of demolition activities tree protection signs will be placed on all trees to be preserved (see Mitigation Measure BIO-1). Additionally, the Migratory Bird Treaty Act requires that nesting migratory birds not be adversely affected. To ensure compliance with the Act, additional tree pruning or removal deemed necessary should be removed from the site outside of the nesting season. Implementation of Mitigation Measure BIO-2 would ensure that nesting migratory birds are not adversely affected.

Bats

Swaim Biological Incorporated (SBI) completed habitat and occupancy surveys for special-status bat species at the Old Juvenile Hall Justice Center in August 2023. SBI's qualified biologists surveyed structures internally and externally for roosting bats and identified points of bat ingress and exit points in preparation for structure demolition. One (1) daytime internal bat roost and two (2) night emergence surveys were conducted at the Old Juvenile Hall Justice Center (see Attachment C).

The Old Juvenile Hall Justice Center has suitable open/cavity and crevice bat roost habitat and has multiple bat access points. In addition, suitable foliage roost habitat was observed in multiple locations surrounding the Old Juvenile Justice Center. However, no maternity roost, juvenile bats, large clusters of bats, bats emerging from the building, or signs of bat use were observed during the August 23rd and 24th, 2023 surveys. In addition, relatively low bat activity was recorded during the two (2) bat emergence surveys and acoustic surveys conducted over the two-night survey period. Therefore, the Old Juvenile Hall Justice Center is unlikely to be currently occupied by bats, unlikely to support a large number of bats, and has an overall low potential to become occupied throughout the year (e.g., migrating bats using the building for day roosting during the fall migration season [September 1st - October 15th]). However, if the suitable bat roost habitat is left open and assessable to bats, though unlikely, it is possible the Old Juvenile Hall Justice Center could become occupied by a small number of bats. Rather than establishing a permanent colony, these small groups of bats that could occupy the Old Juvenile Hall Justice Center are likely to use multiple roosts throughout the year and change roost locations within each season (e.g., change day roost locations multiple times during the maternity season [April 15th – August 31st]). Resulting in the Old Juvenile Hall Justice Center becoming occupied and unoccupied throughout the year on a few occasions. So, based on the results of these surveys, the Old Juvenile Hall Justice Center is currently unoccupied by bats and is unlikely to support a large number of bats during the maternity or winter hibernation seasons. Due to the current unoccupied status and overall low potential for a small number of bats to use the Old Juvenile Hall Justice Center for roosting, demolition of the facility is unlikely to displace a significant number of bats or significantly reduce the total amount of available bat roost habitat in the project area. Therefore, the demolition of the Old Juvenile Hall Justice Center is not expected to adversely affect the local or regional bat populations.

In addition to the suitable bat roost habitat observed at the Old Juvenile Hall Justice Center, alternate roost habitat was observed adjacent to the Old Juvenile Hall Justice Center in the form of large oaks and other large trees along the Oregon Gulch riparian corridor north of the building, bridges in the project vicinity with suitable bat roost habitat, adjacent residential buildings along Radio Lane, and other County owned facilities such as the Department of Probation and Shasta County Health and Human Services. These structures and tree roost habitats (e.g., crevice and foliage roost habitat) provide similar bat roost habitats to those observed within the Old Juvenile Justice Center and trees scheduled for removal. Though no bats or signs of bat use were observed within or on the exterior of the Old Juvenile Hall Justice

Center, due to the presence of suitable bat roost habitat, a small number of bats may occupy the building on occasion throughout the year. However, these alternate roost habitats/locations discussed above should provide adequate replacement bat roost habitat if bats are displaced by demolition activities. Therefore, no compensatory roost habitat is proposed for planned for the proposed project.

Conclusion

No bats were observed during the daytime roost surveys or during the night emergence surveys. However, bats may switch roosts on a nightly basis, during different seasons throughout the year (e.g., maternity vs. hibernation roosts), and especially during transitional seasons like the spring and fall migration seasons. Therefore, there is still potential of bats roosting within the justice center where suitable habitat was observed. Due to the observation of suitable bat day roost habitat and suitable entry and exit locations within the Old Juvenile Hall Justice Center, implementation of Mitigation Measure BIO-3 would reduce impacts to less than significant levels.

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

The project site does not contain any rivers or streams that could support native riparian habitat. Best Management Practices will be implemented during demolition activities to minimize erosion and sediment impacts to Oregon Gulch adjacent to the site. Impacts are considered less than significant.

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?*

The project site is located entirely within an upland area that is predominantly developed and does not contain any potentially regulated waters or wetlands or the United States or State. There are no drainage courses that enter the project site, or any drainages that connect to downstream areas that could be potentially jurisdictional. Additionally, there are no areas on the project site capable of supporting wetlands or riparian vegetation. As noted above, Oregon Gulch is located the north of the project site, outside the Old Juvenile Hall Justice Center facility, that is jurisdictional. However, no demolition activities will encroach into Oregon Gulch or any other potentially regulated water feature adjacent to the project site. Therefore, demolition activities would not result in impacts to any State or federally protected waters or wetlands and no mitigation or permitting are required.

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?*

Wildlife movement corridors, also referred to as dispersal corridors or landscape linkages, are generally defined as linear features along which animals can travel from one habitat or resource area to another. Although Oregon Gulch is located adjacent to the site's northern boundary, the subject property is in a developed state and does not contain any greenbelts for wildlife movement, or native vegetation and undeveloped land capable of supporting the movement of wildlife, particularly corridors that facilitate movement of species between larger stands of native habitat. The proposed demolition activities for the project would not result in an impact on the ability for medium to small mammal movement on the site. No impact would occur in this regard.

e) *Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

Shasta County does not currently have a tree preservation ordinance. Therefore, the project would have no impact on any local policies or ordinances protecting biological resources such as a Tree Protection Ordinance. As previously

discussed above, three ornamental trees are anticipated to be removed near the new security fence and existing trees immediately adjacent to the facility may need to be pruned to allow equipment access. Prior to the initiation of demolition activities tree protection signs will be on all trees to be preserved. Impacts are less than significant in this regard.

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 Habitat Conservation Plan (HCP) is a federal planning document that is prepared pursuant to Section 10 of the Federal Endangered Species Act (FESA). A Natural Community Conservation Plan (NCCP) is a State planning document administered by CDFW. There are no HCPs, NCCPs or other habitat conservation plans that apply to the proposed project. No impact would occur in this regard.

Mitigation Measures

The following mitigation measures have been developed to reduce potential impacts related to *Biological Resources* to less than significant levels:

Mitigation Measure BIO-1

Prior to the initiation of demolition activities, the County shall place tree protection signs on all trees to be preserved.

Mitigation Measure BIO-2

In order to avoid impacts to nesting birds, including raptors, protected under the federal Migratory Bird Treaty Act and California Fish and Game Code Section 3503 and Section 3503.5, including their nests and eggs, one of the following shall be implemented:

- Vegetation removal and other ground-disturbance activities associated with demolition shall occur between September 1st and January 31st when birds are not nesting; or

- If vegetation removal or ground disturbance activities occur during the nesting season, a pre-construction nesting survey shall be conducted by a qualified biologist to identify active nests in and adjacent to the work area. Surveys shall begin prior to sunrise and continue until vegetation and nests have been sufficiently observed. The survey shall take into account acoustic impacts and line-of-sight disturbances occurring as a result of the project in order to determine a sufficient survey radius to avoid nesting birds.

  At a minimum, the survey report shall include a description of the area surveyed, date and time of the survey, ambient conditions, bird species observed in the area, a description of any active nests observed, any evidence of breeding behaviors (e.g., courtship, carrying nest materials or food, etc.), and a description of any outstanding conditions that may have impacted the survey results (e.g., weather conditions, excess noise, the presence of predators, etc.). The results of the survey shall be submitted to the CDFW upon completion. The survey shall be conducted no more than one week prior to the initiation of construction. If construction activities are delayed or suspended for more than one week after the preconstruction survey, the site shall be resurveyed.

  If active nests are found, the County shall contact the CDFW and the USFWS regarding appropriate action to comply with the Migratory Bird Treaty Act and California Fish and Game Code Section 3503. Compliance measures may include, but are not limited to, exclusion buffers, sound-attenuation measures, seasonal work closures based on the known biology and life history of the species identified in the survey, as well as ongoing monitoring by biologists.

Mitigation Measure BIO-3

The following minimization measures for bats shall be implemented:

- Environmental training including information regarding local bat species and their general roost ecology for demolition crews prior to demolition.
- If feasible, demolition activities shall be conducted outside the maternity season (April 15th – August 31st).
- The Shasta County Department of Public Works shall inspect and plug soffit access points along the south side of the building, western field, and eastern chicken coop and receiving bay. If needed, a qualified biologist shall assist in identifying and plugging entry and exit locations and all other points identified during the surveys. The County shall use expanding foam or hardware cloth to plug and remove the potential bat entry and exit locations outside the maternity (April 16th – September 1st) and winter hibernation seasons (October 16th – February 28th).

Should demolition activities occur outside of the maternity season (April 15th – August 31st), the following measures shall be implemented by the County:

- Within two days (48 hours) of the start of work a preconstruction bat roost surveys shall be conducted by a qualified biologist. Surveys shall include internal and external surveys for roosting bats and inspection of all bat exclusion measures to ensure they are in working order. This survey can be combined with general preconstruction surveys (e.g., nesting bird survey). If bat exclusion measures are determined to be in poor working order, then night emergence surveys shall be conducted to determine if bats are currently occupying onsite structures.
- If bats are observed, at any time, within onsite structures, bats shall be allowed to leave on their own. Under the supervision of a qualified bat biologist, one-way bat doors can be used to ensure bats cannot reenter the identified roost. Once bats are confirmed to have left, the roost habitat shall be completely sealed so bat cannot reenter. In addition, the roost habitat shall be modified to reduce the suitability for roosting bats (e.g., placing fans in the barn increase the airflow and lower the structure daytime and nighttime temperatures). Bat eviction methods (e.g., one-way doors) and roost modifications shall only occur outside the bat maternity season (April 15th – August 31st).
- If individual nonbreeding and non-special status bats are present, a qualified biologist may be retained to develop a roost protection plan, remove the bats, and work may proceed year-round onsite. If a maternity roost or special status species bat is observed, no work is allowed without first, notifying and consultation with CDFW, development of a bat protection plan, excluding bats outside of the breeding season, and providing alternate roost site(s).

Findings

Based upon the review of the information above, with implementation of mitigation measures the proposed project will have a less than significant impact with respect to *Biological Resources*.

Documentation and References

ENPLAN. 2010a. *Cultural Resources Inventory for the Shasta County Juvenile Hall Expansion Project on Radio Lane, Shasta County, California*. June 1, 2010.

ENPLAN. 2010b. *Biological Study and Wetland Screening For Expansion of Juvenile Hall Facility*. April 28, 2010.

SBI (Swaim Biological Incorporated). 2023. *Structural Surveys for Special-Status Bat Species*. September 7, 2023.

V. Cultural Resources

The purpose of the section of the Initial Study is to identify any potential cultural resources within or adjacent to the proposed project, and to assist the Lead Agency, in this case the Shasta County, in determining whether such resources meet the office definitions of "historical resources," as provided in the California Public Resources Code (PRC), in particular under the California Environmental Quality Act (CEQA).

CEQA requires a lead agency to determine whether a project may have a significant effect on historical resources (Section 21084.1). If it can be demonstrated that a project will cause damage to resources Eligible for or Listed in the California Register of Historic Resources (CRHR), Tribal Cultural Resources (TCRs) and other resources on county or local lists, or those determined by the lead agency to be significant, the lead agency may require reasonable efforts be made to permit any or all of the resources to be preserved in place or left in an undisturbed state. To the extent that they cannot be left undisturbed, mitigation measures are required (Section 21083.2[a], [b], and [c]).

The analysis in this section has been prepared in accordance with Section 15064.5 of the State CEQA Guidelines, which considers the potential impacts on prehistoric, historic, and paleontological resources. This section describes the potential cultural resources within the project study area, and the applicable regulations that govern those resources and is based on the following evaluations:

- *Cultural Resources Inventory for the Shasta County Juvenile Hall Expansion Project on Radio Lane, Shasta County, California*, prepared by ENPLAN, June 1, 2010.
- *Historical Resource Evaluation of Old Shasta County Juvenile Justice Center, 2680 Radio Lane, Shasta County, California*, prepared by Daly & Associates, August 2023.

The information provided below is an abridged version of the cultural resources report and is provided here to afford a brief context of the potential cultural resources in the project area. Information on the specific location of prehistoric and historic sites is confidential and exempt from the Freedom of Information Act (FOIA) and the California Public Records Act (CPRA); therefore, this information has been redacted for use in this Initial Study and the cultural resource reports are not included as attachments. Professionally qualified individuals, as determined by the California Office of Historic Preservation (OHP), may contact the Shasta County Department of Public Works directly in order to inquire about its availability.

Environmental Setting

The project site has been previously developed or altered from its natural state by the construction of the Old Juvenile Hall Justice Center, which consists of administrative buildings, paved parking areas for staff and visitors, inmate classrooms, a basketball court, a garden, and a grass field for recreation. The Old Juvenile Hall Justice Center building is situated in the eastern half of a 65-acre parcel owned by the County, which is bound on the north by Breslauer Way, on the south by Radio Lane, on the west by the Sacramento River, and on the east by Eastside Road. Numerous ornamental trees and shrubs have been planted around buildings, and turf grasses have become established in recreation areas.

The Old SCJJC is a one-story building that was originally designed for Shasta County by architect E. Geoff Bangs in 1956.Over the course of 60+ years of occupation, the original building was extensively modified with additions and alterations to both the interior and exterior spaces. The interior of the horizontal block was altered to provide educational space, juvenile court activities, and other program related to supporting the residents of the facility. The exterior was altered with the removal of all the original windows and doors, new stucco cladding, and additions along the east elevation of the security wing. A major addition to the north elevation of the security wing was made in 1992, turning the entire facility into an "I" plan building. Even with the updates made in 1992 to the Old Juvenile Hall Justice Center, Shasta County constructed a new, up-to-date, juvenile detention facility in 2012-2013, just to the east of the subject building, to replace the aging and no-longer efficient facility.

Ethnographic

At the time of European-American contact (1830-1840), the project vicinity appears to have been inhabited by the Dau-nom (Baldhill) Wintu. The Wintu belong to the family of Penutian speakers, a linguistic stock whose members are found throughout California within four main language families including Wintuan, Maiduan, Yokutsan, and Utian (Moratto 1984). Wintuan language subgroups consist of Wintu (Northern Wintuan), Nomlaki (Central Wintuan), and Patwin (Southern Wintuan) (Kroeber 1925). The Wintu were further divided into nine major groups based upon their geographic location, including the Dau-nom subgroup, which was the southernmost of these (DuBois 1935). According to DuBois, the Dau-nom culture shared traits with both the Wintu and the Nomlaki, and they had friendly relations with both the Elpom (Keswick) Wintu to the north of them and the Nomlaki to the south (DuBois 1935).

The Wintu diet/subsistence strategy was similar to many other California groups, and was focused on three predictable resources-acorns, deer and salmon-all of which were of high nutritional value, easily stored, and dependably available on a seasonal basis. The Wintu lived in permanent villages during the winter, subsisting mainly on stored foods. In the late spring and summer months, they moved upland to temporary resource procurement camps (in brush shelters) usually located no more than three to four days' walk from the main village. Food resources were periodically returned to the base camp for storage, which was guarded by those unable to participate in the gathering rounds (DuBois 1935; La Pena 1978). Because the streams within their eastern territory were rich in salmon, the Dau-nom Wintu would fish on the Sacramento River and its tributaries during the spring and fall runs and would trade salmon-flour (DuBois 1935). In addition, Dau-nom Wintu relied on smaller game, and participated in communal rabbit drives and net-hunting of birds such as quail and waterfowl (DuBois 1935).

Archaeological

The earliest systematic archaeological investigations in northern California were conducted during the 1930s and 1940s and were associated with the construction of Shasta Dam. Smith and Weymouth (1952) recorded a large number of prehistoric midden sites along Squaw Creek and the Sacramento, Pit, and McCloud rivers, with artifact assemblages suggesting that habitation of the sites by the Penutian-speaking Wintu occurred by about 450 years ago. Later work at Squaw Creek implied occupation of the area began about 6,500 years ago, and the artifact assemblages suggest that Hokan-speaking peoples inhabited these sites prior to Wintu occupation (Sundahl 1992). Work conducted by SLM and various consultants over the past 15 years within Shasta and Tehama Counties has resulted in the identification of prehistoric sites and constituents as old as 7,000 to 8,000 years. Archaeological investigations in northern California at Clear Lake near Borax Lake provide clear evidence that that region was first colonized at the end of the Pleistocene and associated with the "Western Clovis Tradition" (Willig and Aikens 1988), dating around 13,500 years ago (Fiedel 1999, 2000). It has still not been determined whether these early Californians were present in the northern Sacramento Valley at that time.

The above archaeological studies as well as linguistic evidence suggests that hunter-gatherers speaking proto-Hokan languages first inhabited the Sacramento Valley and were then slowly displaced in various directions upon the arrival of several waves of Penutian speakers from the north, northeast, and south (Moratto 1984). Penutian sites are associated regionally with the Shasta Complex (Wintu), which is recognized by settlements near streams, semi-subterranean houses, hunter-gatherer subsistence with emphasis on salmon and acorns, and hopper mortar use for acorn processing (Moratto 1984). It is estimated that the Wintu arrived in the Sacramento Valley approximately 1,000 to 1,200 years ago, resulting in the displacement of Hokan-speaking peoples from the area (Moratto 1984).

Regional History

The first known recorded historic use of the region by European-Americans occurred during the late 1820s and early 1830s when the trapping expeditions of Jedediah Strong Smith, Peter Skene Ogden, and the Hudson Bay Company entered the Sacramento Valley (Petersen 1965). Population increases occurred within Shasta County in excess of 100 percent from 1850-1860, 1870-1880, and 1930-1940 (Shasta County 1975). Five key episodes contributed to European-American settlement and population increases in Shasta County: (1) the acquisition of the Rancho Buenaventura land grant by Pierson B. Reading in 1846, his discovery of gold on Clear Creek in 1848, and the subsequent California Gold

Rush that began in late 1849; (2) the Homestead Act of 1862; (3) the arrival of the Central Pacific Railroad in 1872; (4) the copper-mining boom that began in the late 1880s; and, (5) the Central Valley Project of 1935, which provided relief from the Great Depression throughout the Sacramento Valley region and the Redding area.

Although mining promoted the early development of the Redding area, the Sacramento River floodplain and raised uplands adjacent to local creeks provided the Redding area with prime agricultural lands for farming, ranching, and cattle grazing and sustained its long-term development. The production of agricultural goods for the local economy played a vital role in supporting population increases within the Redding area and at various Shasta County gold fields and towns, especially prior to the arrival of the railroad. With the arrival of the railroad in 1872, agricultural goods could also be produced for export to the wider California and national economies. This allowed for the continuance and growth of Shasta County's agricultural economy despite the boom-and-bust nature of the mining economy.

The California and Oregon Railroad (owned by the "Big Four"-Crocker, Hopkins, Huntington, and Stanford) established the town of Redding in 1872 at Poverty Flat, where the construction of the California segment of the Transcontinental Railroad (TCR) from Marysville to Redding terminated as railroad companies reorganized over a ten-year period. Rail construction commenced north of Redding through the Sacramento River canyon in 1882, and in 1887 it joined the rail in Ashland, Oregon, which was already connected to Portland. Between 1872 and 1882, Redding served as the northernmost termination point for the TCR in California, allowing travelers from the Atlantic Coast and Midwest to travel and settle in the area, and economic goods to be imported and exported. Redding was incorporated in 1887, and in 1888 became the Shasta County seat over the objection of the town of Shasta (Petersen 1965; Smith 1999).

Sensitivity

The results of archival research, comment solicitation, previous surveys adjacent to the study area, and the environmental context all contribute to an assessment of the sensitivity level for a given project area. Many prehistoric village sites were located close to the banks of the Sacramento River, which is approximately 0.1 miles east of the project area. However, due to the amount of ground disturbance that occurred through the development and operation of the Old Juvenile Hall Justice Center facility, the likelihood of finding intact surface evidence of prehistoric or historic cultural resources is considered to be low.

Regulatory Setting

This section summarizes current federal, State, and local regulations relevant to the review of *Cultural Resources* for this project. Ordinances, regulations, or standards that are applicable to the environmental review of biological resource impacts include the following:

National Register of Historic Places

To be eligible for listing on the National Register, a resource must be significant in American history, architecture, archaeology, engineering, or culture, and generally must be greater than 50 years in age. Districts, sites, buildings, structures, and objects of potential significance must meet one or more of the following four established criteria (36 CFR Section 60.4):

- *Criterion A.* Properties that are associated with events that have made a significant contribution to the broad patterns of our history.
- *Criterion B.* Properties that are associated with the lives of persons significant to our past.
- *Criterion C.* Properties 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.
- *Criterion D.* Properties that have yielded, or may be likely to yield, information important in prehistory or history.

In addition to these criteria, a resource must retain integrity to be considered eligible for listing on the NRHP. Integrity is the authenticity of the physical identity that is evidenced by the survival of characteristics that existed during the resource's period of significance. Resources must retain enough of their character or appearance to be recognizable as resources and to convey the reasons for their significance. Integrity is 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 National Register criteria, but it must also possess integrity. The evaluation of a historic property's integrity is sometimes a subjective judgment, but it must always be grounded in an understanding of the property's physical elements and how they relate to its significance. National Register Bulletin 15 describes seven aspects of integrity used in order to determine a historic property's integrity:

1. *Location.* The relationship between the property and its location is often important in understanding why the property was created.
2. *Design.* The design aspect includes the combination of elements that create the form, plan, space, structure, and style of a property.
3. *Setting.* The setting is defined as the physical environment of a historic property.
4. *Materials.* Materials are the physical elements combined during a particular period of time and in a particular configuration to form a historic property.
5. *Workmanship.* Workmanship is the physical evidence of the crafts of a particular culture of people during any given period in history or prehistory.
6. *Feeling.* Feeling is described as a property's expression of the aesthetic or historic sense of a particular period of time.
7. *Association.* Association is the direct link between an important historic event or person and a historic property.

Section 101(d)(6)(A) of the National Historic Preservation Act (NHPA) allows properties of traditional religious and cultural importance to a Native American tribe to be determined eligible for NRHP inclusion. In addition, a broader range of Traditional Cultural Properties (TCPs) is also considered and may be determined eligible for or listed in the NRHP. A TCP is a property associated with the cultural practices or beliefs of a living community; TCPs are rooted in that community's history and are important in maintaining the continuing cultural identity of the community. In the NRHP programs, "culture" is understood to mean the traditions, beliefs, practices, lifeways, arts, crafts, and social institutions of any community, be it an Indian tribe, a local ethnic group, or the nation as a whole.

California Register of Historical Places

As provided in California Public Resources Code (PRC) Section 5020.4, the California Legislature established the CRHR in 1992. The CRHR is used as a guide by state and local agencies, private groups, and citizens to identify the state historical resources and properties to be protected, to the extent prudent and feasible, from substantial adverse change. The CRHR, as instituted by the California Public Resources Code, automatically includes all California properties already listed in the NRHP and those formally determined to be eligible for listing in the NRHP. The CRHR may also include various other types of historical resources that meet the criteria for eligibility, including the following:

- Individual historic resources.
- Resources that contribute to a historic district.
- Resources identified as significant in historic resource surveys.
- Resources with a significance rating of Category 3 through Category 5 in the State Inventory (Categories 3 and 4 refer to potential eligibility for the NRHP; Category 5 indicates a property with local significance).

The CRHR follows the lead of the NRHP in utilizing the 50-year threshold: a resource is usually considered for its historical significance only after it reaches the age of 50 years. This threshold is not absolute but was selected as a reasonable span of time after which a professional evaluation of historical value/importance should be made. The criteria for listing resources in the CRHR were expressly developed to be in accordance with previously established criteria developed for listing on the NRHP. Section 15064.5(a)(3) of the CEQA Guidelines states that "[g]enerally, 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" (PRC Section 5024.1; 14 CCR 4852), including if the resource:

PRC Section 5024.1 requires an evaluation of historical resources to determine their eligibility for listing in the CRHR. The purpose of the register is to maintain listings of the State's historical resources and to indicate which properties are to be protected from substantial adverse change. The criteria for listing resources on the CRHR were expressly developed to be in accordance with previously established criteria developed for listing in the National Register of Historic Places (NRHP), enumerated below. According to PRC 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:

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

A historical resource is a resource listed in, or determined to be eligible for listing, in the CRHR (Section 21084.1), a resource included in a local register of historical resources (Section 15064.5[a][2]), or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (Section 15064.5[a][3]).

Impact Analysis

The following includes an analysis of environmental parameters related to *Cultural Resources* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur.

Would the Project:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?			X	
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?		X		
c) Disturb any human remains, including those interred outside of dedicated cemeteries?		X		

a) *Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?*

Significant cultural resources, as buildings, sites, structures, objects, and districts significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, must meet the criteria described in the *Regulatory Setting*, above. If no eligible resources are identified within the project area, then the project is not considered to have a significant impact on cultural resources. In addition, State regulations require that measures be taken to protect any resources that are uncovered during construction, and compliance with CEQA Guidelines Section 15064.5(f) requires that construction activities halt if potentially significant resources are discovered until the resources can be assessed by a qualified person.

Based on the result of the *Cultural Resources Inventory for the Shasta County Juvenile Hall Expansion Project* (ENPLAN, 2010) there are no historic or prehistoric archaeological sites located during the cultural resources survey of the project site. The survey did note the main structure and accessory structures associated with the Old Juvenile Hall Justice Center facility. All but the small administrative building and the main juvenile hall building were constructed after 1980. The three maintenance sheds and the eight portable classrooms are not considered "Historical Resources" under CEQA. The

remaining two structures, the main juvenile hall facility and a small administrative building directly east were constructed in 1953 and are potential historic resources.

Eligibility Consideration

An intensive-level field survey of the Old Juvenile Hall Justice Center building was conducted and consisted of inspecting the building and its overall interrelationship with the surrounding landscape that is located within the subject parcel. The evaluation examined the built-environment resource in the context of its surrounding landscape, noting the condition of the existing structure, construction materials, function, and any noteworthy physical elements of the resource. This information was used to create baseline data to determine the potential eligibility of the subject property as a historic resource. These resources meet none of the criteria (A-D; 1-4) for either registry as discussed below (Daly, 2023).

A/1. *A property associated with events that have made a significant contribution to the board patterns of our national history or with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.*

The Old Juvenile Hall Justice Center building at 2680 Radio Lane has not been found to be directly associated with important themes or aspects regarding the history of juvenile justice in Shasta County or California between 1957 and 1972. The juvenile detention center, and later alterations to become a juvenile justice center as well, is just one of many located in California. The Shasta County facility was not discovered to have been an outstanding example of a juvenile detention facility, nor was the facility the site of where important advances in the detention and rehabilitation of juveniles were created and promoted. We could find no evidence that the Old Juvenile Hall Justice Center was associated with any important themes with the administration of juvenile facilities in Shasta County or California. The property is not eligible for listing in the CRHR under Criterion 1.

B/2. *A property associated with the lives of persons significant to our past.*

The Old Juvenile Hall Justice Center building at 2680 Radio Lane was designed by the architect E. Geoff Bangs in 1956, and constructed by Singleton Construction Company of Eureka, California in 1957 to replace the aging and inadequate Ross Cottage facility that had served the county since 1942. Shasta County has on file architectural drawings of the evolution of the Old Juvenile Hall Justice Center, which allowed an accurate examination of the changes and alterations made to the building since its construction. The Old SCJJC building was designed using a modest, California Ranch style of architecture applied to the "T" plan building of intersecting rectangular masses. The original wood windows, doors, and trim that are considered contributing characteristics to the Ranch style of architecture were removed from the Old Juvenile Hall Justice Center when it was extensively remodeled and enlarged in 1992. The building does not represent an important example of a juvenile justice complex, and it is not a significant example of the architect E. Geoff Bangs. The subject building does not meet the standards to be considered a significant historical resource for listing in the CRHR under Criterion 3.

C/3. *A property that would embody the distinctive characteristics of a type, period, or method of construction, or that represents the work of a master, or that possesses high artistic values.*

The Old Juvenile Hall Justice Center building at 2680 Radio Lane has not been found to be directly associated with any important persons or groups in the field of juvenile justice or confinement of juvenile offenders in Shasta County or California. The property is not eligible for listing in the CRHR under Criterion 2.

D/4. *A property that has yielded, or may be likely to yield, information important in prehistory or history.*

It does not appear that the Old Juvenile Hall Justice Center at 2680 Radio Lane has the capacity to yield information important in the history of the California or Shasta County. The Old Juvenile Hall Justice Center has lost substantial aspects of its physical integrity and lacks the ability to convey its history through the loss of its original design, materials, workmanship, feeling, and association with a juvenile detention center of the 1950s. Aspects of integrity are used to

determine if a property can convey a specific historical theme or period of architectural history important on a local, regional, or state level.

Conclusion

As discussed above Old Juvenile Hall Justice Center building does not meet any of the National or California Historic registry criteria (A-D, 1-4). Given this, it does not qualify for listing on the NRHP or the CRHR. It is neither a "Historic Property" as defined by NEPA nor "Historical Resource" as defined by CEQA. Therefore, the proposed project will not affect any resources on, or eligible for listing on, the National Register of Historic Places or California Register of Historical Resources.

b) *Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?*

The proposed project would result in a significant impact if it caused a substantial adverse change in the significance of an archaeological resource. Based on the results of the investigations described above, there are no resources in the project area with intact visible surface manifestations that qualify as archaeological resources or historical resources as defined by CEQA Guidelines Section 15064.5. However, there is the possibility of encountering buried archaeological resources during project activities, including ground disturbing activities onsite. Inadvertent discovery procedures should be implemented for resources found as a result of project development would reduce potential impacts on undocumented resources to less than significant levels. To minimize potential impacts to prehistoric and historic resources, including Native American cultural resources, Mitigation Measure CR-1 and Mitigation Measure CR-2 are required. With implementation of these measures, impacts to cultural resources would be less than significant.

c) *Disturb any human remains, including those interred outside of dedicated cemeteries?*

There are no known burial sites on or immediately adjacent to the proposed project site. If human remains are unearthed during future development of the site, the provisions of California Health and Safety Code Section 7050.5 shall apply. Under this Section, no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition, pursuant to California PRC Section 5097.98 and Mitigation Measure CR-2. Impacts are considered less than significant with mitigation incorporated.

Mitigation Measures

The following mitigation measures have been developed to reduce potential impacts related to *Cultural Resources* to less than significant levels:

Mitigation Measure CR-1

If cultural resources, such as chipped or ground stone, or bone are inadvertently discovered during ground-disturbance activities, work shall be stopped within 50 feet of the discovery, as required by the California Environmental Quality Act (CEQA; January 1999 Revised Guidelines, Title 14 California Code of Regulations [CCR] 15064.5 (f)). Work near the archaeological finds shall not resume until a professional archaeologist, who meets the Secretary of the Interior's Standards and Guidelines, has evaluated the material, and offered recommendations for further action.

Mitigation Measure CR-2

If in the event that previously unidentified evidence of human burial or human remains are discovered during project construction, work will stop at the discovery location, within 20 meters (66 feet), and any nearby area reasonably suspected to overlie human remains (Public Resources Code, Section 7050.5) the Shasta County Coroner must be informed and consulted, per State law. If the coroner determines the remains to be Native American, he or she shall contact the Native American Heritage Commission within 24 hours. The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descendent. The most likely descendent will be given an

opportunity to make recommendations for means of treatment of the human remains and any associated grave goods. when the commission is unable to identify a descendant or the descendants identified fail to make a recommendation, or the landowner or his or her authorized representative rejects the recommendation of the descendants and the mediation provided for in subdivision (k) of Section 5097.94, if invoked, fails to provide measures acceptable to the landowner, the landowner or his or her authorized representative shall reinter the human remains and items associated with Native American human remains with appropriate dignity on the property in a location not subject to further and future subsurface disturbance. Work in the area shall not continue until the human remains are dealt with according to the recommendations of the County Coroner, Native American Heritage Commission and/or the most likely descendent have been implemented.

Findings

Based upon the review of the information above, with implementation of mitigation measures the proposed project will have a less than significant impact with respect to *Cultural Resources*.

Documentation and References

Daly (Daly & Associates). 2023. *Historical Resource Evaluation of Old Shasta County Juvenile Justice Center, 2680 Radio Lane, Shasta County, California*. August 2023.

ENPLAN. 2010. *Cultural Resources Inventory for the Shasta County Juvenile Hall Expansion Project on Radio Lane, Shasta County, California*. June 1, 2010.

VI. Energy

The purpose of the section of the Initial Study is to analyze the potential direct and indirect environmental impacts associated with the project's projected energy consumption. Such impacts can include the depletion of nonrenewable resources (e.g., oil, natural gas, coal, etc.). Analyses of emissions of air quality and greenhouse gas (GHG) pollutants during both the construction and long-term operational phases of the project are analyzed in Section III, AIR QUALITY, and Section VIII, GREENHOUSE GAS EMISSIONS.

Environmental Setting

Energy resources required for the proposed project would primarily include the use of petroleum-based fuels during demolition activity. Because the project proposes demolition of a former juvenile hall facility, the project would not require the long-term use of electricity or natural gas from local utility providers.

Regulatory Setting

This section summarizes current State regulations relevant to the review of *Energy* consumption for this project. Ordinances, regulations, or standards that are applicable to the environmental review of potential impacts related to energy consumption include the following:

California Energy Efficiency Standards for Residential and Nonresidential Buildings (Title 24)

Building energy efficiency standards for new residential and nonresidential buildings were adopted by the California Energy Resources Conservation and Development Commission (now the California Energy Commission (CEC)) in June 1977 and are updated every three years (CCR Title 24, Part 6). CCR Title 24, Part 6 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods. On August 11, 2021, the CEC adopted the 2022 Energy Code. In December, it was approved by the California Building Standards Commission for inclusion into the California Building Standards Code. The 2022 Energy Code encourages efficient electric heat pumps, establishes electric-ready requirements for new homes, expands solar photovoltaic and battery storage standards, strengthens ventilation standards, and more. Buildings whose permit applications are applied for on or after January 1, 2023, must comply with the 2022 Energy Code.

California Green Building Standards

The California Green Building Standards Code (California Code of Regulations, Title 24, Part 11), commonly referred to as the CALGreen Code, is a statewide mandatory construction code that was developed and adopted by the California Building Standards Commission and the California Department of Housing and Community Development. The CALGreen standards require new residential and commercial buildings to comply with mandatory measures under the topics of planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and environmental quality. CALGreen also provides voluntary tiers and measures that local governments may adopt which encourage or require additional measures in the five green building topics. The most recent update to the CALGreen Code was adopted in 2022.

2008 California Energy Action Plan Update

The California Public Utilities Commission and California Energy Commission *2008 Energy Action Plan Update* provides a status update to the *2005 Energy Action Plan II,* which is the State's principal energy planning and policy document. The plan continues the goals of the original *Energy Action Plan*, describes a coordinated implementation plan for State energy policies, and identifies specific action areas to ensure that California's energy is adequate, affordable, technologically advanced, and environmentally sound. First-priority actions to address California's increasing energy demands are energy efficiency, demand response (i.e., reduction of customer energy usage during peak periods in order to address system

reliability and support the best use of energy infrastructure), and the use of renewable sources of power. If these actions are unable to satisfy the increasing energy and capacity needs, the plan supports clean and efficient fossil-fired generation.

Renewable Energy Standards/Renewable Portfolio Standard

In 2002, California established its Renewable Portfolio Standard program[7] with the goal of increasing the annual percentage of renewable energy in the state's electricity mix by the equivalent of at least 1 percent of sales, with an aggregate total of 20 percent by 2017. The California Public Utilities Commission subsequently accelerated that goal to 2010 for retail sellers of electricity (Public Utilities Code Section 399.15(b)(1)). Then-Governor Schwarzenegger signed Executive Order S-14-08 in 2008, increasing the target to 33 percent renewable energy by 2020. In September 2009, then-Governor Schwarzenegger continued California's commitment to the Renewable Portfolio Standard by signing Executive Order S-21-09, which directs the CARB under its AB 32 authority to enact regulations to help the State meet its Renewable Portfolio Standard goal of 33 percent renewable energy by 2020. In September 2010, the CARB adopted its Renewable Electricity Standard regulations, which require all the State's load-serving entities to meet this target. In October 2015, then-Governor Brown signed into legislation Senate Bill 350, which requires retail sellers and publicly owned utilities to procure 50 percent of their electricity from eligible renewable energy resources by 2030. Signed in 2018, SB 100 revised the program's goal to achieve the 50 percent renewable resources target by December 31, 2026 and a 60 percent renewable resources target by December 31, 2030. SB 100 also established a further goal to have an electric grid that is entirely powered by clean energy by 2045. Under the bill, the State cannot increase carbon emissions elsewhere in the western grid or allow resource shuffling to achieve the 100 percent carbon-free electricity target.

Impact Analysis

The impact analysis for energy consumption focuses on the three sources of energy that are relevant to the proposed project: electricity, natural gas, and transportation fuel for vehicle and truck trips as well as the fuel necessary for demolition. The analysis of electricity/natural gas usage is based on California Emissions Estimator Model (CalEEMod) project specific data, which quantifies energy use for occupancy.

The following includes an analysis of environmental parameters related to *Energy* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur.

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

[7] The Renewable Portfolio Standard is a flexible, market-driven policy to ensure that the public benefits of wind, solar, biomass, and geothermal energy continue to be realized as electricity markets become more competitive. The policy ensures that a minimum amount of renewable energy is included in the portfolio of electricity resources serving a state or country.

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

Construction Impacts

As described throughout this document, implementation of the proposed project would occur over a period of approximately three weeks and would include the abatement, demolition, removal, and disposal of a former juvenile hall facility. During the proposed demolition activities, energy would be consumed in the form of petroleum-based fuels used to power off-road construction vehicles and equipment on the project site, construction worker travel and hauling truck trips to and from the project site, and to operate generators to provide temporary power for lighting and electronic equipment. Once demolition activities are complete there is no potential for the project to result in operational energy use.

Table 4-3, OFF-ROAD DEMOLITION EQUIPMENT DIESEL FUEL CONSUMPTION and Table 4-4, DEMOLITION PERIOD PETROLEUM FUEL CONSUMPTION provides an estimate of construction fuel consumption for the project based on the information provided by the CalEEMod emissions model (CAPCOA, 2022).

Table 4-3
OFF-ROAD DEMOLITION EQUIPMENT DIESEL FUEL CONSUMPTION

Equipment[1]	Quantity[1]	Horsepower[1]	Load Factor[1]	Fuel Consumption Rate[2] (gallons per hour)	Duration[1] (total hours)	Total Fuel Consumption[3,4] (gallons)
Tractors/Loaders/Backhoes	3	84	0.37	1.55	168	781
Rubber Tired Dozers	1	367	0.40	7.34	168	1,233
Concrete/Industrial Saws	1	33	0.73	1.20	168	202
					Total Diesel Usage[4]	***2,216***

1. Derived from CalEEMod modeling results (CAPCOA, 2022).
2. Derived using the following equation: *Fuel Consumption Rate = Horsepower x Load Factor x Fuel Consumption Factor.*
   Where: Fuel Consumption Factor for a diesel engine is 0.05 gallons per horsepower per hour (gal/hp/hr).
3. Derived using the following equation: *Total Fuel Consumption = Quantity of Equipment x Duration in Hours x Fuel Consumption Rate.*
4. Values may be slightly off due to rounding.

Table 4-4
DEMOLITION PERIOD PETROLEUM FUEL CONSUMPTION

Phase	Number of Daily Trips[1]	Number of Days[1]	Average Round-Trip Commute Distance (in miles)[1]	Fuel Usage (miles per gallon)[2]	Gasoline/Diesel Usage (in gallons)[3,4]
Worker Trips (Gasoline)					
Demolition	13	21	22.2	10	606
				Total Gasoline Usage[4]	***606***
Hauling Trips (Diesel)					
Demolition	46	21	20	8	2,415
				Total Diesel Usage[4]	***2,415***

1. Derived from CalEEMod modeling results (CAPCOA, 2022).
2. This is a conservative estimate, as it assumes no electric, hybrid, or other alternative fuel vehicles in the fleet mix.
3. Derived using the following equation: *Gasoline/Diesel Usage = # of Daily Trips x # of Days x Avg. Round-Trip Distance / Fuel Usage*
4. Values may be off due to rounding.

As shown in Tables 4-3 and 4-4, off-road construction equipment and hauling trips would consume a total of approximately 4,631 gallons of diesel fuel over the project's demolition period. Worker trips would consume a total of approximately 606 gallons of gasoline over the project's demolition period. These fuels would be consumed over a period of approximately three weeks and would represent a small percentage of the total energy used in the state.

There are no unusual project characteristics that would need construction equipment or practices that would be less energy efficient than at comparable construction sites in the region or state. Demolition activity would be temporary and fuel consumption would cease once demolition ends. Due to the temporary nature of demolition activities, the fuel and energy needed during the project would not be considered a wasteful or inefficient use of energy. Therefore, it is

expected that energy consumption associated with the proposed project would be comparable to other similar demolition projects and would, therefore, not result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources during project implementation.

b) *Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

As described throughout this document, implementation of the proposed project would occur over a period of approximately three weeks and would include the abatement, demolition, removal, and disposal of a former juvenile hall facility. Once demolition activities are complete there is no potential for the project to result in operational energy use. Based on the temporary nature of the proposed demolition activity, the proposed project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. State and local agencies regulate the use and consumption of energy during construction activity through various methods and programs. Impacts would be less than significant in this regard.

Mitigation Measures

No mitigation measures are required.

Findings

Based upon the review of the information above, implementation of the proposed project will have a less than significant with respect to *Energy*.

Documentation and References

CAPCOA (California Air Pollution Control Officer's Association). 2022. *California Emission Estimator Model (CalEEMod). Version 2022.1.1.6*. Model Run on 8/8/23. [Online]: https://www.caleemod.com/.

VII. Geology and Soils

The purpose of this section of the Initial Study is to describe the geologic and seismic setting of the project area, identify potential impacts associated with implementation of the proposed project, and, as necessary, recommend mitigation to reduce the significance of impacts. The issues addressed in this section are risks associated with faults, strong seismic ground shaking, seismic-related ground failure such as liquefaction, landslides, and unstable geological units and/or soils.

Environmental Setting

The project site is located in the eastern Klamath Mountains within the Klamath Mountains Geomorphic Geologic Province of California.

Active faults are defined as faults that have had surface displacement in the Holocene epoch (in the past 11,000 years) based on California Code of Regulations (CCR) Division 2, Title 14, also known as the Alquist-Priolo Earthquake Fault Zoning Act (A-P Act). Potentially active faults are defined by the A-P Act as faults showing surface displacement during mid to late Quaternary time (about 1.6 million years before present) that have a relatively high potential for ground rupture. In general, Quaternary faults that do not record evidence of Holocene surface displacement are not considered as being active by the State. In addition, the California Geologic Survey (CGS) evaluates the activity rating of a fault in fault evaluation reports (FER). FERs compile available geologic and seismologic data and evaluate if a fault should be zoned as active, potentially active, or inactive. If a FER evaluates a fault as active, then it is typically incorporated into a Special Studies Zone in accordance with the Alquist-Priolo Earthquake Hazards Act. The project site is not located within an Alquist-Priolo Earthquake Fault Zone and no active faults are known to pass through the project site (DOC, 2015; DOC, 2023a).

Based on the most recent available data, no active or potentially active faults are reported to be present within the boundaries of the project site (DOC, 2015). According to the U.S. Department of Agriculture, Natural Resources Conservation Service, two soil units occur in the study area: Honcut gravelly loam and Tehama loam, 0 to 3 percent slopes (NRCS, 2023).

The site is relatively flat and is situated at approximately 480 feet above mean sea level According to DOC's *Fire Perimeters and Deep Landslide Susceptibility Mapping*, the project site is not identified as a very high landslide susceptibility area (DOC, 2023b).

Regulatory Setting

This section summarizes current federal, State, and local regulations relevant to the review of *Geology and Soils* for this project. Ordinances, regulations, or standards that are applicable to the environmental review of potential impacts related to geology and soils include the following:

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 (originally enacted as the Alquist-Priolo Special Studies Zones Act and renamed in 1994) and is intended to reduce the risk to life and property from surface fault rupture during earthquakes. The main purpose of the law is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. The law only addresses the hazard of surface fault rupture and is not directed toward other earthquake hazards. The Alquist-Priolo Act requires the State Geologist to establish regulatory zones known as "Earthquake Fault Zones" around the surface traces of active faults and to issue appropriate maps. The maps are distributed to all affected cities, counties, and state agencies for their use in planning efforts. Local agencies must regulate most development projects within the zones. Projects include all land divisions and most structures for human occupancy.

Seismic Hazard Mapping Act

The Seismic Hazard Mapping Act (SHMA) was adopted by the state in 1990 to protect the public from the effects of non-surface fault rupture earthquake hazards, including strong ground shaking, liquefaction, seismically induced landslides, or other ground failure caused by earthquakes. The goal of the act is to minimize loss of life and property by identifying and mitigating seismic hazards. The California Geological Survey prepares seismic hazard zone maps and provides them to local governments; these maps identify areas susceptible to amplified shaking, liquefaction, earthquake-induced landslides, and other ground failures. SHMA requires responsible agencies to only approve projects within seismic hazard zones following a site-specific investigation to determine if the hazard is present, and if so, the inclusion of appropriate mitigation(s). In addition, the SHMA requires real estate sellers and agents at the time of sale to disclose whether a property is within one of the designated seismic hazard zones.

2022 California Building Code

The California Building Code (CBC), which is codified in CCR Title 24, Part 2, was promulgated to safeguard the public health, safety, and general welfare by establishing minimum standards related to structural strength, egress facilities, and general building stability. The purpose of the CBC is to regulate and control the design, construction, quality of materials, use/occupancy, location, and maintenance of all building and structures within its jurisdiction. Title 24 is administered by the California Building Standards Commission, which, by law, is responsible for coordinating all building standards. Under State law, all building standards must be centralized in Title 24 or they are not enforceable.

Shasta County and City of Anderson Multi-Jurisdictional Hazard Mitigation Plan

The purpose of the Shasta County and City of Anderson Multi-Jurisdictional Hazard Mitigation Plan is to implement and sustain actions that reduce vulnerability and risk from hazards or reduce the severity of the effects of hazards on people and property. Mitigation actions are both short-term and long-term activities, which reduce the cause or occurrence of hazards; reduce exposure to hazards or reduce effects of hazards through various means to include preparedness, response, and recovery measures.

City of Redding Local Hazard Mitigation Plan

The City's Local Hazard Mitigation Pla*n* identifies local hazards and the likelihood of occurrence and potential magnitude of damage. The City of Redding Local Hazard Mitigation Plan includes resources and information to assist in planning for hazards. The plan provides a list of actions that may assist the City of Redding in reducing risk and preventing loss from future hazard events. The actions address hazards, as well as specific activities for, Wildland Fire, Flood, Hazardous Material, Severe Winter Weather, Earthquakes, Utility Disruption, Aviation Disaster, Chemical, Biological, Radiological, Nuclear, Explosives (CBRNE), Dam Overflow or Failure, and Volcanic issues.

Impact Analysis

The following includes an analysis of environmental parameters related to *Geology and Soils* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur.

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

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:

There are no Alquist-Priolo earthquake faults designated in the subject area of Shasta County. Shasta County is entirely within Seismic Zone 3 of the Uniform Building Code, and the greater Redding area is located in an area designated in the Health and Safety Element Seismic and Geologic Hazards Element of the General Plan as an area of moderate seismicity (Shasta, 2004). The project involves the demolition of the Old Juvenile Hall Justice Center facility and no onsite development is proposed at this time. No impact would occur in this regard.

ii. Strong seismic ground shaking:

The entire northern California region is subject to the potential for moderate to strong seismic shaking due to distant seismic sources. Seismic shaking can be generated on faults many miles from the project vicinity. An earthquake is caused by a sudden slip on a fault. Stresses in the earth's outer layer push the sides of the fault together. Stress builds up, and the rocks slip suddenly, releasing energy in waves that travel through the earth's crust and cause the shaking that is felt during an earthquake. Renewed activity at Mt. Shasta or Mt. Lassen, would presumably be associated with seismicity and potential strong ground shaking. Seismic shaking potential is, therefore, a regional hazard; the hazard is not higher or lower at the project site than throughout the region.

According to the Shasta County and City of Anderson Multi-Jurisdictional Hazard Mitigation Plan, the County is at a relatively low risk of exposure to strong seismic shaking (Shasta, 2017). It should be noted however that no region is immune from potential earthquake damage. Seismic shaking potential is considered minimal, and the hazard is not

higher or lower at the project site than throughout the region. The project involves the demolition of the Old Juvenile Hall Justice Center facility and no onsite development is proposed at this time. No impact would occur in this regard.

iii. Seismic-related ground failure, including liquefaction:

Liquefaction results from an applied stress on the soil, such as earthquake shaking or other sudden change in stress condition, and is primarily associated with saturated, cohesionless soil layers located close to the ground surface. During liquefaction, soils lose strength and ground failure may occur. This is most likely to occur in alluvial (geologically recent, unconsolidated sediments) and stream channel deposits, especially when the groundwater table is high. The project involves the demolition of the Old Juvenile Hall Justice Center facility and no onsite development is proposed at this time. No impact would occur in this regard.

iv. Landslides:

Landslides occur throughout Shasta County, although they have not been considered a major problem. Landslides are more prevalent in the eastern and northern portions of the County and are commonly related to the sedimentary and volcanic rocks in these vicinities. As described above, the site is relatively flat and is situated at approximately 480 feet above mean sea level According to DOC's Fire Perimeters and Deep Landslide Susceptibility Mapping, the project site is not identified as a very high landslide susceptibility area (DOC, 2023b). The project involves the demolition of the former Juvenile Hall Justice Center and no onsite development is proposed at this time. No impact would occur in this regard.

b) *Result in substantial soil erosion or the loss of topsoil?*

As discussed above under *Environmental Setting*, two soil units occur in the study area: Honcut gravelly loam and Tehama loam, 0 to 3 percent slopes (NRCS, 2023). To minimize soil erosion during site demolition, all demolition related activities, including debris stockpiling and debris offsite removal activities are required to meet Shasta County Code Chapter 18.10 and be conducted in accordance with the conditions set forth within Section E.10 "Construction Site Storm Water Runoff Control Program", of the MS4 permit, the construction general permit and applicable county requirements. Impacts would be less than significant in this regard.

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?*

Refer to impact discussion VII.a, above. Impacts would be less than significant.

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?*

Expansive soils have high shrink-swell potential that expand when wet and shrink when dry. This can result in damage to foundations and structures. Shasta County is characterized by moderate to low expansiveness in soils with small, scattered areas of high expansiveness. The proposed project is not located on expansive soils. No impact would occur in this regard.

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

The project involves the demolition of the Old Juvenile Hall Justice Center facility and no onsite development is proposed at this time. No impact would occur in this regard.

f) *Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

No paleontological resources or unique geologic features existing on the project site and the potential for their occurrence is considered minimal. No impact would occur in this regard.

Mitigation Measures

No mitigation measures are required.

Findings

Based upon the review of the information above, implementation of the proposed project will have a less than significant impact with respect to *Geology and Soils*.

Documentation and References

DOC (California Department of Conservation). 2015*. Fault Activity Map of California (2010)*. [Online]: https://gis.conservation.ca.gov/server/rest/services/CGS/FaultActivinityMapCA/MapServer. Accessed July 25, 2023.

DOC. 2023a. *EQ ZAPP: California Earthquake Hazards Zone Application*. [Online]: https://maps.conservation.ca.gov/cgs/EQZApp/app/. Accessed July 25, 2023.

DOC. 2023b. *Fire Perimeters and Deep Landslide Susceptibility*. [Online]: https://Fire Perimeters and Deep-Seated Landslide Susceptibility (ca.gov). Accessed July 25, 2023.

DOC. 2018. *Earthquake Fault Zones, A Guide for Government Agencies, Property Owners/Developers, and Geoscience Practitioners for Assessing Fault Rupture Hazards in California – Special Publication 42.* Revised 2018.

DOC. 1997. *Mineral Land Classification of Alluvial Sand and Gravel, Crushed Stone, Volcanic Cinders, Limestone, and Diatomite within Shasta County, California – DMG Open File Report 97-03*. 1997.

NRCS (Natural Resources Conservation Service). 2023.*Web Soil Survey Report- Shasta County Area, California.* [Online]: https://websoilsurvey.nrcs.usda.gov/app/. Accessed July 25, 2023.

Shasta (Shasta County). 2017. *Shasta County and City of Anderson Multi-Jurisdictional Hazard Mitigation Plan*. November 16, 2017.

Shasta. 2004. *Shasta County General Plan*. September 2004.

USDA (United States Department of Agriculture, Soil Conservation Service and Forest Service). 1974. *Soil Survey of Shasta County Area*. August 1974.

VIII. Greenhouse Gas Emissions

This section of the Initial Study evaluates greenhouse gas (GHG) emissions associated with the proposed project and analyzes project compliance with applicable regulations. Consideration of the project's consistency with applicable plans, policies, and regulations, as well as the introduction of new sources of GHGs, is included in this section.

Environmental Setting

"Global warming" and "global climate change" are the terms used to describe the increase in the average temperature of the earth's near-surface air and oceans since the mid-20th century and its projected continuation. Warming of the climate system is now considered to be unequivocal, with global surface temperature increasing approximately 1.33 degrees Fahrenheit (°F) over the last 100 years. Continued warming is projected to increase global average temperature between 2 and 11°F over the next 100 years.

Natural processes and human actions have been identified as the causes of this warming. The International Panel on Climate Change (IPCC) concludes that variations in natural phenomena such as solar radiation and volcanoes produced most of the warming from pre-industrial times to 1950 and had a small cooling effect afterward.[8] After 1950, however, increasing GHG concentrations resulting from human activity such as fossil fuel burning, and deforestation have been responsible for most of the observed temperature increase. These basic conclusions have been endorsed by more than 45 scientific societies and academies of science, including all the national academies of science of the major industrialized countries. Since 2007, no scientific body of national or international standing has maintained a dissenting opinion.

Increases in GHG concentrations in the earth's atmosphere are thought to be the main cause of human-induced climate change. The IPCC is now 95 percent certain that humans are the main cause of current global warming.[9] GHG naturally trap heat by impeding the exit of solar radiation that has hit the earth and is reflected back into space. Some GHG occur naturally and are necessary for keeping the earth's surface inhabitable. However, increases in the concentrations of these gases in the atmosphere during the last 100 years have decreased the amount of solar radiation that is reflected into space, intensifying the natural greenhouse effect, and resulting in the increase of global average temperature.

Gases that trap heat in the atmosphere are referred to as GHG because they capture heat radiated from the sun as it is reflected back into the atmosphere, much like a greenhouse does. The accumulation of GHG has been implicated as the driving force for global climate change. The primary GHG are carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O), ozone, and water vapor.

While the presence of the primary GHG in the atmosphere are naturally occurring, CO_2, CH_4, and N_2O are also emitted from human activities, accelerating the rate at which these compounds occur within earth's atmosphere. Emissions of CO_2 are largely by-products of fossil fuel combustion, whereas methane results from off-gassing associated with agricultural practices, coal mines, and landfills. Other GHG include hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride, and are generated in certain industrial processes.

CO_2 is the reference gas for climate change because it is the predominant GHG emitted. The effect that each of the aforementioned gases can have on global warming is a combination of the mass of their emissions and their global warming potential (GWP). GWP indicates, on a pound-for-pound basis, how much a gas is predicted to contribute to global warming relative to how much warming would be predicted to be caused by the same mass of CO_2. CH_4 and N_2O are substantially more potent GHG than CO_2, with GWP of 28 and 265 times that of CO_2, respectively.[10]

[8] IPCC, *2014: Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*, https://www.ipcc.ch/site/assets/uploads/2018/05/SYR_AR5_FINAL_full_wcover.pdf
[9] IPCC, *2014: Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*, https://www.ipcc.ch/site/assets/uploads/2018/05/SYR_AR5_FINAL_full_wcover.pdf
[10] IPCC, *2014: Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*, https://www.ipcc.ch/site/assets/uploads/2018/05/SYR_AR5_FINAL_full_wcover.pdf

In emissions inventories, GHG emissions are typically reported in terms of pounds or metric tons (MT) of CO_2 equivalents (CO_2e). CO_2e are calculated as the product of the mass emitted of a given GHG and its specific GWP. While CH_4 and N_2O have much higher GWP than CO_2, CO_2 is emitted in such vastly higher quantities that it accounts for the majority of GHG emissions in CO_2e.

Regulatory Setting

This section summarizes current federal, State, and local regulations relevant to the review of *Greenhouse Gas Emissions* for this project. Ordinances, regulations, or standards that are applicable to the environmental review of potential impacts related to greenhouse gases include the following:

California Renewable Portfolio Standard

In 2002, California established a Renewable Portfolio Standard (RPS) that requires a retail seller of electricity to include in its resource portfolio a certain amount of electricity from renewable energy sources, such as wind, geothermal, small hydro, and solar energy. The retailer can satisfy this obligation by using renewable energy from its own facilities, purchasing renewable energy from another supplier's facilities, using Renewable Energy Credits (RECs) that certify renewable energy has been created, or a combination of all of these. California's RPS requirements have been accelerated and expanded a number of times since the program's inception. Most recently, then-Governor Jerry Brown signed into law Senate Bill (SB) 100 in September 2018, which requires utilities to procure 60 percent of their electricity from renewables by 2030 and sets as a state policy that state agencies and end-use retail customers receive 100 percent of energy from renewable and zero-carbon resources by 2045. In addition, SB 350 requires California utilities to develop Integrated Resource Plans (IRPs) that incorporate a GHG emission reduction planning component. Compliance with the California RPS requires PG&E to develop and implement an IRP that demonstrates they are on schedule to comply with the goals of providing 60 percent renewable sources by 2030. To ensure retail sellers meet their RPS requirement, the California Public Utilities Commission (CPUC) is responsible for establishing enforcement procedures and imposing penalties for non-compliance with the program (CPUC, 2018).

Executive Order S-3-05

In 2005, in recognition of California's vulnerability to the effects of climate change, then-Governor Arnold Schwarzenegger established Executive Order S-3-05. This order sets forth target dates by which statewide GHG emissions would be reduced. These include by 2010, reduce GHG emissions to 2000 levels; by 2020, reduce GHG emissions to 1990 levels; and by 2050, reduce GHG emissions to 80 percent below 1990 levels.

Assembly Bill 32 (California Global Warming Solutions Act of 2006)

The primary legislation that has driven GHG regulation and analysis in California is the California Global Warming Solutions Act of 2006 (AB 32; California Health and Safety Code Division 25.5, Sections 38500 - 38599), which instructs CARB to develop and enforce regulations for the reporting and verifying of statewide GHG emissions. The act directed CARB to set a greenhouse gas emissions limit based on 1990 levels, to be achieved by 2020. The bill set a timeline for adopting a scoping plan for achieving GHG reductions in a technologically and economically feasible manner.

Executive Order B-30-15

In April 2015, Governor Edmund G. Brown, Jr. signed Executive Order B-30-15 in order to establish an interim GHG reduction goal for California of 40 percent below 1990 levels by 2030. This target GHG reduction by 2030 would make it possible for California to reach the ultimate goal of reducing GHG emissions by 80 percent under 1990 levels by the year 2050.

Senate Bill 32

On September 8, 2016, Governor Jerry Brown signed Senate Bill 32 (Pavley - Chapter 249, Stats. of 2016), requiring California to reduce GHG emissions to 40 percent below 1990 levels by 2030. SB 32 states that: "In adopting rules and regulations to achieve the maximum technologically feasible and cost-effective greenhouse gas emissions reductions authorized by this division, the state [air resources] board shall ensure that statewide greenhouse gas emissions are reduced to at least 40 percent below the statewide greenhouse gas emissions limit no later than December 31, 2030." SB 32 codifies the interim target created by EO B-30-15 for 2030.

CARB Climate Change Scoping Plan

The California Air Resources Board (CARB) adopted the Scoping Plan to achieve the goals of AB 32. The Scoping Plan establishes an overall framework for the measures that would be adopted to reduce California's GHG emissions. CARB determined that achieving the 1990 emissions level would require a reduction of GHG emissions of approximately 29 percent below what would otherwise occur in 2020 in the absence of new laws and regulations (referred to as "business-as-usual"). The Scoping Plan functions as a roadmap to achieve GHG reductions in California required by AB 32 through subsequently enacted regulations. AB 32 requires CARB to update the Scoping Plan at least once every five years. CARB adopted the first major update to the Scoping Plan on May 22, 2014. The updated Scoping Plan summarizes recent science related to climate change, including anticipated impacts to California and the levels of GHG reduction necessary to likely avoid risking irreparable damage. It identifies the actions California has already taken to reduce GHG emissions and focuses on areas where further reductions could be achieved to help meet the 2020 target established by AB 32.

On December 14, 2017 CARB adopted a second update to the Scoping Plan[11]. The 2017 Scoping Plan details how the State will reduce GHG emissions to meet the 2030 target set by Executive Order B-30-15 and codified by SB 32. Other objectives listed in the 2017 Scoping plan are to provide direct GHG emissions reductions; support climate investment in disadvantaged communities; and support the Clean Power Plan and other Federal actions.

California Building Energy Efficiency Standards and Green Building Standards

Title 24 of the California Code of Regulations regulates how each new home and business is built or altered in California. It includes requirements for the structural, plumbing, electrical, and mechanical systems of buildings, and for fire and life safety, energy conservation, green design, and accessibility in and about buildings. Two sections of Title 24 – Part 6, the California Energy Code, and Part 11, the California Green Building Standards Code or CalGreen Code – contain standards that address GHG emissions related to construction. The current 2022 Title 24 standards became effective January 1, 2023.

Shasta County Air Quality Management District

The Shasta County AQMD does not have an adopted Climate Action Plan, greenhouse gas threshold of significance, or guidance document for assessing project-level greenhouse gas impacts under CEQA. The following Shasta County AQMD rule is applicable to the project: "Rule 3:28 Stationary Internal Combustion Engines. This rule applies to any gaseous, diesel, or any other liquid-fueled stationary internal combustion engine within the boundaries of the air district, including emergency standby engines. Emergency standby internal engines may be operated only during emergencies and for testing and maintenance purposes. Testing and maintenance shall be limited to no more than 100 hours per year."

In 2010, the Shasta County AQMD initiated the regional climate action planning (RCAP) process and released a draft RCAP in 2011. The Draft RCAP contains a 2008 baseline GHG emissions inventory for the community, business-as-usual emissions forecasts for year 2020, the adjusted business-as-usual forecasts for 2020, and emission reduction measures

[11] California Air Resources Board, *California's 2017 Climate Change Scoping Plan,* https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf. Accessed May 9, 2018.

the County may implement. However, the draft RCAP has not been adopted and, therefore, is not used to assess the project's greenhouse gas emissions.

The County's current General Plan (2004) does not contain goals or policies directly aimed at reducing greenhouse gas emissions. Goals and policies within the Circulation Element, Air Quality Element affect or reduce greenhouse gas generation through requiring or promoting alternative transit infrastructure.

There are currently no State, regional, or county guidelines or thresholds with which to direct project-level CEQA review. As a result, Shasta County reserves the right to use a qualitative and/or quantitative threshold of significance until a specific quantitative threshold is adopted by the state or regional air district. The United States Environmental Protection Agency (EPA) identifies four primary constituents that are most representative of the GHG emissions. They are:

- *Carbon Dioxide (CO_2).* Emitted primarily through the burning of fossil fuels. Other sources include the burning of solid waste and wood and/or wood products and cement manufacturing.
- *Methane (CH_4).* Emissions occur during the production and transport of fuels, such as coal and natural gas. Additional emissions are generated by livestock and agricultural land uses, as well as the decomposition of solid waste.
- *Nitrous Oxide (N_2O).* The principal emitters include agricultural and industrial land uses and fossil fuel and waste combustion.
- *Fluorinated Gases.* These can be emitted during some industrial activities. Also, many of these gases are substitutes for ozone-depleting substances, such as CFC's, which have been used historically as refrigerants. Collectively, these gases are often referred to as "high global-warming potential" gases.

The primary generators of GHG emissions in the United States are electricity generation and transportation. The EPA estimates that nearly 85 percent of the nation's GHG emissions are comprised of carbon dioxide (CO_2). The majority of CO_2 is generated by petroleum consumption associated with transportation and coal consumption associated with electricity generation. The remaining emissions are predominately the result of natural-gas consumption associated with a variety of uses.

Impact Analysis

At this time, neither the SCAQMD nor Shasta County has adopted numerical thresholds of significance for GHG emissions that would apply to the proposed project. The SCAQMD, however, recommends that all projects subject to CEQA review be considered in the context of GHG emissions and climate change impacts, and that CEQA documents include a quantification of GHG emissions from all project sources, as well as minimize and mitigate GHG emissions as feasible. The project would generate GHG emissions through long-term operational activities.

In light of the lack of established GHG emissions thresholds that would apply to the proposed project, CEQA allows lead agencies to identify thresholds of significance applicable to a project that are supported by substantial evidence. Substantial evidence is defined in the CEQA statute to mean "facts, reasonable assumptions predicated on facts, and expert opinion supported by facts" (14 CCR 15384(b)).[12] Substantial evidence can be in the form of technical studies, agency staff reports or opinions, expert opinions supported by facts, and prior CEQA assessments and planning documents. Therefore, to establish additional context in which to consider the order of magnitude of the proposed project's GHG emissions, this analysis accounts for the following considerations by other government agencies and associations about what levels of GHG emissions constitute a cumulatively considerable incremental contribution to climate change:

[12] 14 CCR 15384 provides the following discussion: "Substantial evidence" as used in the Guidelines is the same as the standard of review used by courts in reviewing agency decisions. Some cases suggest that a higher standard, the so called "fair argument standard" applies when a court is reviewing an agency's decision whether to prepare an EIR. Public Resources Code section 21082.2 was amended in 1993 (Chapter 1131) to provide that substantial evidence shall include "facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts." The statute further provides that "argument, speculation, unsubstantiated opinion or narrative, evidence which is clearly inaccurate or erroneous, or evidence of social or economic impacts which do not contribute to, or are not caused by, physical impacts on the environment, is not substantial evidence."

- Sacramento Metropolitan Air Quality Management District established thresholds, including 1,100 metric tons of CO_2e per year for the construction or operational phase of land use development projects, or 10,000 direct metric tons of CO_2e per year from stationary source projects.[13]

- Placer County Air Pollution Control District recommends a tiered approach to determine if a project's GHG emissions would result in a significant impact. First, project GHG emissions are compared to the de minimis level of 1,100 metric tons of CO_2e per year. If a project does not exceed this threshold, it does not have significant GHG emissions. If the project exceeds the de minimis level and does not exceed the 10,000 metric tons of CO_2e per year bright line threshold, then the project's GHG emissions can be compared to the efficiency thresholds. These thresholds are 4.5 metric tons of CO_2e per-capita for residential projects in an urban area, and 5.5 metric tons of CO_2e per-capita for residential projects in a rural area.[14]

- Bay Area Air Quality Management District has adopted 1,100 metric tons of CO_2e per year as a project-level bright-line GHG significance threshold that would apply to operational emissions from mixed land-use development projects, a threshold of 10,000 metric tons of CO_2e per year as the significance threshold for operational GHG emissions from stationary-source projects, and an efficiency threshold of 4.6 metric tons of CO_2e per service population per year.[15]

As described, the 1,100 metric tons of CO_2e per year threshold is used by other air districts for land use development projects. Therefore, the proposed project's GHG emissions were compared to the 10,000 metric tons of CO_2e per year quantitative threshold. The substantial evidence for this GHG emissions threshold is based on the expert opinion of various California air districts, which have applied the 10,000 metric tons of CO_2e per year threshold in numerous CEQA documents where those air districts were the lead agency.

The following includes an analysis of environmental parameters related to *Greenhouse Gas Emissions* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur.

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

a) *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*

As described throughout this document, implementation of the proposed project would occur over a period of approximately three weeks and would include the abatement, demolition, removal, and disposal of a former juvenile hall facility. The project would result in a temporary increase in GHG emissions during demolition activities including exhaust emissions from on-road haul trucks, worker commute vehicles, and off-road heavy-duty equipment. Once demolition activities are complete there is no potential for the project to result in operational GHG emissions.

[13] Sacramento Metropolitan Air Quality Management District, Guide to Air Quality Assessment in Sacramento County, May 2018, http://www.airquality.org/Residents/CEQA-Land-Use-Planning/CEQA-Guidance-Tools
[14] Placer County Air Pollution Control District, 2017 CEQA Handbook – Chapter 2, Thresholds of Significance. https://placerair.org/DocumentCenter/View/2047/Chapter-2-Thresholds-of-Significance-PDf
[15] Bay Area Air Quality Management District, CEQA Air Quality Guidelines, May 2017, http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en

Construction emissions for the proposed project were estimated using the California Emissions Estimator Model (CalEEMod), which is a statewide land use emissions computer model designed to provide a uniform platform for government agencies to quantify potential GHG emissions associated with both construction and operation of a variety of land use projects (CAPCOA, 2022). The model applies inherent default values for various land uses, including trip generation rates based on the Institute of Transportation Engineers (ITE) Manual, vehicle mix, trip length, average speed, etc. However, where project-specific data is available, such data should be input into the model. Project-specific information from Section 2.0, PROJECT DESCRIPTION, where available, was input into the model. Otherwise, where project-specific information was not available, the model default values were used for estimating emissions from the project.

Table 4-5, ANNUAL GHG EMISSIONS FROM DEMOLITION ACTIVITIES (UNMITIGATED) presents the estimates of unmitigated annual GHG emissions from the proposed demolition activities as compared to the 1,100 $MTCO_2e/yr$ threshold of significance.

Table 4-5
ANNUAL GHG EMISSIONS FROM DEMOLITION ACTIVITIES (UNMITIGATED)

Project Phase	GHG Emission ($MTCO_2e/yr$)[1]	Threshold of Significance ($MTCO_2e/yr$)[2]	Significant Impact?
Construction	41.6	1,100	No
1. Derived from CalEEMod modeling results (CAPCOA, 2022). 2. SMAQMD, 2020; PCAPCD, 2016; MCAQMD, 2010.			

As indicated in Table 4-5, the construction GHG emissions from the proposed project are well below the threshold of significance of 1,100 $MTCO_2e/yr$ used by multiple air districts in the state. Therefore, the proposed project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.

b) *Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

California passed the California Global Warming Solutions Act of 2006 (AB 32; California Health and Safety Code Division 25.5, Sections 38500 - 38599). AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and establishes a cap on statewide GHG emissions. AB 32 requires that statewide GHG emissions be reduced to 1990 levels by 2020. This reduction will be accomplished by enforcing a statewide cap on GHG emissions that was phased in starting in 2012. To effectively implement the cap, AB 32 directs CARB to develop and implement regulations to reduce statewide GHG emissions from stationary sources. AB 32 specifies that regulations adopted in response to AB 1493 should be used to address GHG emissions from vehicles. However, AB 32 also includes language stating that if the AB 1493 regulations cannot be implemented, then CARB should develop new regulations to control vehicle GHG emissions under the authorization of AB 32.

AB 32 requires CARB to adopt a quantified cap on GHG emissions representing 1990 emissions levels and disclose how it arrived at the cap; institute a schedule to meet the emissions cap; and develop tracking, reporting, and enforcement mechanisms to ensure that the state reduces GHG emissions enough to meet the cap. AB 32 also includes guidance on instituting emissions reductions in an economically efficient manner, along with conditions to ensure that businesses and consumers are not unfairly affected by the reductions. Using these criteria to reduce statewide GHG emissions to 1990 levels by 2020 would represent an approximate 25 to 30 percent reduction in current emissions levels. However, CARB has discretionary authority to seek greater reductions in more significant and growing GHG sectors, such as transportation, as compared to other sectors that are not anticipated to significantly increase emissions.

In September of 2016, SB 32 extended the goals of AB 32 and set a goal to achieve reductions in GHG of 40 percent below 1990 levels by 2030. The new plan, outlined in SB 32, involves increasing renewable energy use, putting more electric cars on the road, improving energy efficiency, and curbing emissions from key industries. Since the proposed project will be operational post 2020, the principal State plan and policy adopted for the purpose of reducing GHG emissions is SB

32. Statewide plans and regulations such as GHG emissions standards for vehicles and the low carbon fuel standard are being implemented at the statewide level, and compliance at the specific plan or project level is not addressed.

The assumption is that SB 32 and other regulations will be successful in reducing GHG emissions and reducing the cumulative GHG emissions statewide. The State has taken these measures, because no project individually could have a major impact (either positively or negatively) on the global concentration of GHG. Therefore, the proposed project would result in a significant impact if it would conflict with State regulations such as AB 32 and SB 32.

The proposed project has been reviewed relative to the climate change policies and measures in CARB's 2022 Climate Change Scoping Plan and, because the project only proposes demolition activities over an approximately three-week period, it has been determined that it would not conflict with State GHG reduction goals. Furthermore, the proposed project would be well below the GHG significance threshold, as discussed under impact discussion VIII.a, above. Impacts would be less than significant in this regard.

Mitigation Measures

No mitigation measures are required.

Findings

Based upon the review of the information above, implementation of the proposed project will have a less than significant impact with respect to *Greenhouse Gas Emissions*.

Documentation and References

CARB (California Air Resources Board). 2022. *2022 Scoping Plan for Achieving Carbon Neutrality*. [Online]: https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents.

California Office of the Attorney General. 2010. *The California Environmental Quality Act Addressing Global Warming Impacts at the Local Agency Level.* Updated January 6, 2010.

IEA (International Energy Agency). 2008. *Energy Efficiency Requirements in Building Codes, Energy Efficiency Policies for New Buildings*. March 2008.

Shasta (Shasta County). 2004. *Shasta County General Plan*. September 2004.

SRTA (Shasta Regional Transportation Agency). 2018. *Regional Transportation Plan and Sustainable Communities Strategy for the Shasta Region*. October 9, 2018.

IX. Hazards and Hazardous Materials

Hazards are those physical safety factors that can cause injury or death, and while by themselves in isolation may not pose a significant safety hazard to the public, when combined with development of projects can exacerbate hazardous conditions. Hazardous materials are typically chemicals or processes that are used or generated by a project that could pose harm to people working at the site or on adjacent areas. Many of these chemicals can cause hazardous conditions to occur should they be improperly disposed of or accidentally spilled as part of project development or operations.

Hazardous materials refer generally to hazardous substances, hazardous waste, and other materials that exhibit corrosive, poisonous, flammable, and/or reactive properties and have the potential to harm human health and/or the environment. The term "hazardous materials" as used in this section includes all materials defined in the California Health and Safety Code Section 25501(n): *"A material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. 'Hazardous materials' include, but are not limited to, hazardous substances, hazardous waste, and any material that a handler or the unified program agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment."*

The purpose of this section of the Initial Study is to identify, to the extent feasible, the potential for hazards associated with historic and current site uses, surrounding sites, and recognized environmental conditions in connection with the project site and to identify potential risks to human health.

Environmental Setting

Emergency Response

Shasta Area Safety Communications Agency (SHASCOM) is the consolidated 9-1-1 emergency response agency serving Shasta County. SHASCOM's communications center provides emergency dispatching services to the Shasta County Fire and Sheriff's Departments, Redding Police and Fire Departments, the Anderson Police Department, the California Highway Patrol (CHP), and ambulance services. The center is located at 3101 South Street, in Redding.

Emergency response plans include elements to maintain continuity of government, emergency functions of governmental agencies, mobilization and application of resources, mutual aid, and public information. Emergency response plans are maintained at the federal, State, and local levels for all types of disaster, both natural and human caused. Local governments have the primary responsibility for preparedness and response activities. Shasta County has numerous levels of emergency response and evacuation plans, including the *Emergency Operations Plan*, approved in 2014. The *Emergency Operations Plan* is used by all key partner agencies within the County to respond to major emergencies and disasters and describes the roles and responsibilities between the County and its departments with local jurisdictions within the County (Shasta, 2014). There is no adopted emergency evacuation plan applicable to the project area.

Fire Protection

The California Department of Forestry and Fire Protection (CAL FIRE) Fire and Resource Assessment Program (FRAP) designates lands in three general classifications, "Moderate", "High" and "Very High" Fire Hazard Severity Zones. The 2007 FRAP (updated May 2008) does not identify the project site or surrounding vicinity as a part of a designated fire hazard severity zone (CAL FIRE, 2008; COR 2023). Additionally, the project site does not fall within a State Responsibility Area (SRA). The proposed project is within Redding Fire Department (RFD) Fire Station 3 response area (COR, 2023).

Hazardous Materials

The U.S. Environmental Protection Agency (EPA) maintains the Enforcement and Compliance History Online (ECHO) program. The ECHO website provides environmental regulatory compliance and enforcement information for

approximately 800,000 regulated facilities nationwide. The ECHO website includes environmental permit, inspection, violation, enforcement action, and penalty information about EPA-regulated facilities. Facilities included on the site are Clean Air Act (CAA) stationary sources; Clean Water Act (CWA) facilities with direct discharge permits, under the National Pollutant Discharge Elimination System; generators and handlers of hazardous waste, regulated under the Resource Conservation and Recovery Act (RCRA); and public drinking water systems, regulated under the Safe Drinking Water Act (SDWA). ECHO also includes information about EPA cases under other environmental statutes. When available, information is provided on surrounding demographics, and ECHO includes other EPA environmental data sets to provide additional context for analyses, such as Toxics Release Inventory data. According to the ECHO program, the project site and adjoining properties are not listed as having a hazardous materials violation (EPA, 2023).

Under Government Code Section 65962.5, both the California Department of Toxic Substances Control (DTSC) and the State Water Resources Control Board (SWRCB) are required to maintain lists of sites known to have hazardous substances present in the environment. Both agencies maintain up-to-date lists on their websites. A search of the DTSC and SWRCB lists identified no open cases of hazardous waste violations within ½-mile of the site (DTSC, 2023; SWRCB, 2023). However, according to the SWRCB, an underground heating oil / fuel oil tank was removed from the property in 1990. Due to tank corrosion a subsurface discharge had occurred and the site was remediated and monitored between June 1990 and April 1996. The site was closed by the SWRCB with no further action on May 6, 1996 (SWRCB, 2023).

The Shasta County Environmental Health Department (EHD) is the administering agency and the Certified Unified Program Agency (CUPA) for Shasta County with responsibility for regulating hazardous materials handlers, hazardous waste generators, underground storage tank facilities, above ground storage tanks, and stationary sources handling regulated substances. A Hazardous Materials Business Plan (HMBP) is required of businesses in Shasta County that handle, use, generate, or store hazardous materials. The primary purpose of this plan is to provide readily available information regarding the location, type, and health risks of hazardous materials to emergency response personnel, authorized government officials, and the public. Large cases of hazardous materials contamination or violations are referred to the Central Valley Regional Water Quality Control Board (CVRWQCB) and the DTSC. Demolition activities do not require the preparation of a HMBP.

Regulatory Setting

Hazardous materials and wastes can pose a significant actual or potential hazard to human health and the environment when improperly treated, stored, transported, disposed of, or otherwise managed. Many federal, State, and local programs that regulate the use, storage, and transportation of hazardous materials and hazardous waste are in place to prevent these unwanted consequences. These regulatory programs are designed to reduce the danger that hazardous substances may pose to people and businesses under normal daily circumstances and as a result of emergencies and disasters.

Current federal, State, and local regulations relevant to the review of *Hazards and Hazardous Materials* for this project are summarized below. Ordinances, regulations, or standards that are applicable to the environmental review of potential impacts related to hazards and hazardous materials include the following:

California Environmental Protection Agency

One of the primary agencies that regulate hazardous materials is the Cal EPA. The state, through Cal EPA, is authorized by the EPA to enforce and implement certain federal hazardous materials laws and regulations. The California DTSC, a department of the Cal EPA, protects California and Californians from exposure to hazardous waste, primarily under the authority of the RCRA and the California Health and Safety Code. The DTSC requirements include the need for written programs and response plans, such as Hazardous Materials Business Plans. DTSC programs include dealing with cleanups of improper hazardous waste management; evaluation of samples taken from sites; enforcement of regulations regarding use, storage, and disposal of hazardous materials; and encouragement of pollution prevention.

California Division of Occupational Safety and Health

Like OSHA at the federal level, the California Division of Occupational Safety and Health (Cal/OSHA) is the responsible State-level agency for ensuring workplace safety. Cal/OSHA assumes primary responsibility for the adoption and enforcement of standards regarding workplace safety and safety practices. In the event that a site is contaminated, a site safety plan must be crafted and implemented to protect the safety of workers. Site safety plans establish policies, practices, and procedures to prevent the exposure of workers and members of the public to hazardous materials originating from contaminated sites or buildings.

California Building Code

The State of California provided a minimum standard for building design through the California Building Code (CBC), which is in Part 2 of Title 24 of the California Code of Regulations. Commercial buildings are plan-checked by the County for compliance with the CBC. Typical fire safety requirements of the CBC included the installation of sprinklers, establishment of fire resistance standards for fire doors, certain building materials, and particular types of construction, and the clearance of debris and vegetation within a prescribed distance from occupied structures in wildlife hazard areas.

California Vehicle Code

The State of California regulates the transportation of hazardous waste originating or passing through the state. Common carriers are licensed by the California Highway Patrol (CHP) pursuant to the California Vehicle Code, Section 32000. This section requires licensing for every motor (common) carrier who transports, for a fee, in excess of 500 pounds of hazardous materials at one time and every carrier, if not for hire, who carries more than 1,000 pounds of hazardous material of the type requiring placards. Common carriers conduct a large portion of the business in the delivery of hazardous materials.

California Department of Forestry and Fire Protection

The California Department of Forestry and Fire Protection (CAL FIRE) has mapped fire threat potential throughout California. CAL FIRE ranks fire threat based on the availability of fuel and the likelihood of an area burning (based on topography, fire history, and climate). The rankings include no fire threat, moderate, high, and very high fire threat. CAL FIRE produced the *2010 Strategic Fire Plan for California*, with goals, objectives, and policies to prepare for and mitigate the effects of fire on California's natural and built environments.

California Fire Code

The California Fire Code (CFC) is Part 9 of the California Building Standards Code (California Code of Regulations, Title 24). Updated every 3 years, the CFC includes provisions and standards for emergency planning and preparedness, fire service features, fire protection systems, hazardous materials, fire flow requirements, and fire hydrant locations and distribution. Similar to the CBC, the CFC is generally adopted on a jurisdiction-by-jurisdiction basis, subject to further modification based on local conditions.

Emergency Response to Hazardous Materials Incidents

To coordinate emergency services provided by local, state, and federal agencies, California has developed an Emergency Response Plan pursuant to the Emergency Services Act. The Plan is administered by the state Office of Emergency Services. Local agencies are required to develop area plans for an organized response to releases of hazardous materials that are dependent on Business Plans submitted by handlers of hazardous materials and waste within that agency's area. Pursuant to California Health and Safety Code, Section 25503(a) and CCR Section 2729, any business handling hazardous material must establish and implement a Hazardous Materials Business Plan. These Business Plans are then submitted to the local administering agency. In the County, the administering agency is SCEHD.

Shasta County Emergency Operations Plan

This Shasta County *Emergency Operations Plan* is an all-hazard plan that describes how Shasta County will organize and respond to emergencies and disasters in the community. It is based on, and is compatible with, federal, State of California, and other applicable laws, regulations, plans, and policies, including Presidential Policy Directive 8, the National Response Framework, and California Governor's Office of Emergency Services plans. Consisting of a Basic Plan, Emergency Function Annexes, and Incident Annexes, the *Emergency Operations Plan* provides a framework for coordinated response and recovery activities during a large-scale emergency. The plan describes how various agencies and organizations in the County will coordinate resources and activities with other federal, State, local, tribal, community organizations, faith-based organizations, and private-sector partners.

Unified Hazardous Waste and Hazardous Materials Management Regulatory Program

In January 1996, Cal-EPA adopted regulations implementing a "Unified Hazardous Waste and Hazardous Materials Management Regulatory Program" (Unified Program). The six elements of the Unified Program are as follows: 1) hazardous waste generators and hazardous waste on-site treatment; 2) underground storage tanks; 3) above-ground storage tanks; 4) hazardous material release response plans and inventories 5) risk management and prevention programs; and 6) Unified Fire Code hazardous materials management plans and inventories. The Unified Program is implemented at the local level by a local agency — the Certified Unified Program Agency (CUPA). The CUPA is responsible for consolidating the administration of the six program elements within its jurisdiction. As mentioned above, the SCEHD is the designated CUPA in the County.

Impact Analysis

Fire Hazard Severity Zones and State Responsibility Areas maps and information available from the City of Redding, Shasta County and State of California were reviewed. Evaluation of the potential impacts are based on information obtained from CAL FIRE, Shasta County, and the California Building Code.

The following includes an analysis of environmental parameters related to *Hazards and Hazardous Materials* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur.

Would the Project:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			X	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			X	
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?			X	

Would the Project:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?				X
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?				X

a) *Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

Hazardous materials are typically chemicals or processes that are used or generated by a project that could pose harm to people working at the site or on adjacent areas. Many of these chemicals can cause hazardous conditions to occur should they be improperly disposed of or accidentally spilled as part of project development or operations. Hazardous materials are also those listed as hazardous pursuant to Government Code Section 65962.5.

Hazardous substances and wastes that could be generated onsite during demolition activities include fuels and oils for machinery and vehicles. Additionally, demolition hazardous waste would be generated, including asbestos and lead-based paint removed from the facility during abatement activities.

If not transported, used, or disposed of in a safe manner, hazardous materials used or generated during demolition represent a potential threat to the public and the environment. Demolition would be required to adhere to State and federal health and safety requirements that are intended to minimize hazardous materials risks to the public, such as California Occupational Safety and Health Regulations (Cal OSHA) requirements, the Hazardous Waste Control Act, the California Accidental Release Prevention program, and the California Health and Safety Code. For example, hazardous materials would not be disposed of or released onto the ground or into the underlying groundwater or any surface water during demolition of the proposed project, and completely enclosed containment would be provided for all refuse generated on the project site. Furthermore, all construction and demolition waste, including trash, litter, 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.

However, to ensure that hazardous wastes that may be generated during demolition are appropriately anticipated and handled, the demolition contractor would be required to implement the Hazardous Materials Abatement Work Plan (ACC, 2022) to ensure potential impacts during demolition are minimized. Impacts would be less than significant in this regard.

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?*

Potential demolition-related hazards could be created during the course of site decommissioning activities given that demolition activities involve the use of heavy equipment, which uses small and incidental amounts of oils and fuels and other potentially flammable substances. The level of risk associated with the accidental release of hazardous substances is not considered significant due to the small volume and low concentration of hazardous materials used during demolition. The demolition contractor would be required to use standard construction controls and safety procedures that would avoid and minimize the potential for accidental release of such substances into the environment. Standard demolition practices would be observed such that any materials released are appropriately contained and remediated as required by local, State, and federal law. Any hazardous materials or substances stored onsite for the approximately three week demolition would be handled in accordance with County, State, and federal regulations. Because any hazardous materials used for demolition would be in small quantities and removed from the site once demolition

activities have been completed, impacts associated with handling, storing, and disposing of hazardous materials from demolition are not anticipated.

Asbestos and lead paint are present within the existing onsite structures (ACC, 2022). All asbestos-containing materials would be stored, handled, transported, and disposed of in accordance with the Reasonable Available Control Measures (RACMs) established in Shasta County Air Quality Management District (SCAQMD) Rule 3.16. In addition, the demolition contractor will be required to obtain daily down-wind and/or indoor air samples to ensure the risk of exposure to air borne asbestos is minimized. Lead-based paint abatement or removal would include removal of any lead hazard, which, according to Title 17 of the California Code of Regulations, includes deteriorated lead-based paint and lead-contaminated soil (soil contaminated with lead paint chips). The California Occupational Safety and Health Administration lead standard for construction activities is implemented under Title 8 of the California Code of Regulations. The standard applies to any construction or demolition activity that may release lead dust or fumes, including manual scraping, manual sanding, heat gun applications, power tool cleaning, rivet busting, abrasive blasting, welding, cutting, or torch burning of lead-based coatings. With completion of the required asbestos and lead paint abatement impacts would be less than significant.

c) *Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*

The proposed project site is not located approximately 0.21 miles north of Bonny View Elementary School. Refer to impact discussions IX.a and IX.b. In addition, the demolition activities proposed by the project, as mitigated and in compliance with regulatory requirements, would not expose sensitive receptors to substantial pollutant concentrations (refer to Section III, AIR QUALITY). Impacts are considered less than significant in this regard.

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

Under Government Code Section 65962.5, both the DTSC and the SWRCB are required to maintain lists of sites known to have hazardous substances present in the environment. Both agencies maintain up-to-date lists on their websites. A search of the DTSC and SWRCB lists identified no open cases of hazardous waste violations within ½-mile of the site (DTSC, 2023; SWRCB, 2023). However, according to the SWRCB, an underground heating oil / fuel oil tank was removed from the property in 1990. Due to tank corrosion a subsurface discharge had occurred and the site was remediated and monitored between June 1990 and April 1996. The site was closed by the SWRCB with no further action on May 6, 1996 (SWRCB, 2023). Less than significant impacts would occur in this regard.

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?*

The proposed project is not located within an airport land use plan or within two miles of a public airport or public use airport. The nearest airport to the project site is the Benton Airport located approximately 2.2 miles to the northwest. No impact would occur in this regard.

f) *Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

City of Redding General Plan Figure 4-9, *Evacuation Routes – Flooding,* and Figure 4-10, *Evacuations Routes – Wildland Fires* (contained in the Health and Safety Element) identify those routes in, through and out of the City that are considered the most suitable for certain mass evacuations. With the exception of South Bonnyview and SR-273, no other roads immediately serving the proposed project are identified as an evacuation route in the City's General Plan. No roadway closures are anticipated during demolition activities. As a result, the proposed project would not impair implementation of any emergency response plan or emergency evaluation plan as it would not alter existing roadways, or physically interfere with existing roadway patterns. Impacts would be less than significant.

g) *Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?*

The proposed project is located within the response area of RFD Fire Station No. 3. Fire Station No. 3 is located approximately one mile northwest of the proposed project at 4255 Westside Road. The proposed project is not located within a designated fire hazard severity zone or SRA. The proposed project would not result in any alterations to slope, wind, or other factors that could potentially exacerbate wildfire risks onsite or within the project vicinity. No impact would occur in this regard.

Mitigation Measures

No mitigation measures are required.

Findings

Based upon the review of the information above, implementation of the proposed project will have a less than significant impact with respect to *Hazards and Hazardous Materials*.

Documentation and References

ACC (ACC Environmental Consultants) 2022. *Hazardous Materials Abatement Work Plan, Old Juvenile Justice Center, 2680 Radio Lane, Redding, CA*. January 2022.

CAL FIRE (California Department of Forestry and Fire Protection). 2023. *State Responsibility Area Viewer.* [Online]: https://calfire-forestry.maps.arcgis.com. Accessed July 25, 2023.

CAL FIRE. 2023. *Fire Hazard Severity Zones.* [Online]: https://egis.fire.ca.gov/FHSZ/. Accessed July 25, 2023.

COR (City of Redding). 2000. *City of Redding General Plan 2000 – 2020, Health and Safety Element*. October 3, 2000.

COR. 2023. *City of Redding Geographic Information System*. [Online]: https://gispub.cityofredding.org/reddingmap/. Accessed July 25, 2023.

DTSC (California Department of Toxics Substances Control). 2023. *Envirostor Database*. [Online]: https://www.envirostor.dtsc.ca.gov. Accessed July 25, 2023.

EPA (U.S. Environmental Protection Agency). 2023. *Enforcement and Compliance History Online*. [Online]: https://echo.epa.gov/. Accessed July 25, 2023.

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Shasta. 2014. *Shasta County Emergency Operations Plan*. September 2014.

Shasta. 2004. *Shasta County General Plan*. September 2004.

SWRCB (State Water Resources Control Board). 2023. *GeoTracker*. [Online]: https://geotracker.waterboards.ca.gov. Accessed July 25, 2023.

X. Hydrology and Water Quality

The purpose of this section of the Initial Study is to describe the hydrologic and water quality setting of the proposed project site and surrounding area. This section also evaluates potential long-term and short-term water quality impacts associated with construction and long-term operation of the proposed project.

Environmental Setting

The project site is relatively flat and is situated at approximately 480 feet above mean sea level and is occupied by the County's former juvenile hall facility, which consists of administrative buildings, paved parking areas for staff and visitors, inmate classrooms, a basketball court, a garden, and a grass field for recreation. Most of the project site has been previously developed or altered from its natural state. Numerous ornamental trees and shrubs have been planted around buildings, and turf grasses have become established in the former recreation areas.

Surface Water Resources

There are no surface water resources within the boundary of the subject site. Oregon Gulch, historically a seasonal tributary of the Sacramento River, but now sustained in summer by irrigation leakage from the Anderson-Cottonwood Irrigation District (ACID) canal and urban runoff, flows eastward across the northern portion of the project area. Oregon Gulch drains the foothills west of the City of Redding. Onsite stormwater runoff is currently directed to an onsite drainage swale adjacent to Radio Lane.

Groundwater Resources

The proposed project is located within the Redding Groundwater Basin (RGWB). The RGWB underlies approximately 544 square miles in the north end of the Sacramento Valley. The County is a member of the Redding Area Water Council (RAWC), a consortium of water purveyors that operate in Shasta County. In 1998, the Shasta County Water Agency, on behalf of the RAWC, prepared the *Coordinated AB 3030 Groundwater Management Plan* for the RGWB. The groundwater management plan was prepared to provide a mechanism for both the public and private stakeholders in the RGWB to evaluate, manage, protect, and preserve local groundwater resources.

As described in the City of Redding 2020 *Urban Water Management Plan*, the RGWB is not an adjudicated basin (COR, 2021). As the basin is not in overdraft, no legal pumping limit has been set; therefore, no overdraft mitigation efforts are currently underway. The entire RGWB groundwater storage capacity is 5.5-million-acre feet (AF) (DWR, 2004).

The County is also participating in a consortium of nearby groundwater users to form a Groundwater Sustainability Agency (GSA) pursuant to the requirements of AB 1739, SB 1168, and SB 1319 collectively known as the Sustainable Groundwater Management Act (SGMA). The proposed project is located within the Anderson Sub-basin of the RGWB that is monitored, reported, and managed by the Enterprise-Anderson Groundwater Sustainability Agency (EAGSA) (DWR, 2023). The EAGSA was formed though a Memorandum of Understanding to sustainably manage groundwater within the Enterprise Sub-basin and Anderson Sub-basin of the RGWB. The EAGSA includes the City of Anderson, Anderson-Cottonwood Irrigation District, Bella Vista Water District, Clear Creek Community Services, District, City of Redding and Shasta County.

Flood Hazards

The Federal Emergency Management Agency (FEMA) has mapped the 100-year and 500-year floodplains along the Sacramento River and creeks in the vicinity of the project site. The majority of the site is located outside of the mapped 100-year floodplain; however, the northeast corner of the site that contains the 1,000 portable school room and shed are located within Zone X (areas of 0.2% annual change flood; areas of 1% chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood (FEMA, 2011).

Regulatory Setting

This section summarizes current federal, State, and local regulations relevant to the review of *Hydrology and Water Quality* for this project. Ordinances, regulations, or standards that are applicable to the environmental review of potential impacts related to hydrology and water quality include the following:

Clean Water Act

The Clean Water Act (CWA) is a federal law that protects the nation's surface waters, including lakes, rivers, coastal wetlands, and "waters of the United States." The CWA specifies that discharges to waters are illegal, unless authorized by an appropriate permit. The permits regulate the discharge of dredged and fill materials, construction-related stormwater discharges, and activities that may result in discharges of pollutants to waters of the United States. If waters of the U.S. are located on a project site, a proposed project is likely to discharge to them, and if impacts on them are anticipated, the project must obtain a CWA Section 401 Water Quality Certification from the appropriate Regional Water Quality Control Board (RWQCB).

Federal Anti-Degradation Policy

The federal Anti-Degradation Policy is part of the CWA (Section 303(d)) and is designed to protect water quality and water resources. The policy directs states to adopt a statewide policy that includes the following primary provisions: (1) existing instream uses and water quality necessary to protect those uses shall be maintained and protected; (2) where existing water quality is better than necessary to support fishing and swimming conditions, that quality shall be maintained and protected unless the state finds that allowing lower water quality is necessary for important local economic or social development; and (3) where high-quality waters constitute an outstanding national resource, such as waters of national and state parks, wildlife refuges, and waters of exceptional recreational or ecological significance, that water quality shall be maintained and protected.

National Pollutant Discharge Elimination System

The NPDES program is administered by the U.S. Environmental Protection Agency (EPA), which delegated oversight in California to the Regional Water Quality Control Boards. The NPDES program provides general permits and individual permits. The general permits are for construction projects that disturb more than one acre of land. The general permit requires the applicant to file a public Notice of Intent (NOI) to discharge stormwater and to prepare and implement a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP includes a site map, description of proposed activities, demonstration of compliance with applicable ordinances and regulations, and a description of Best Management Practices (BMPs) that would be implemented to reduce erosion and discharge of construction-related pollutants. The CWA-established NPDES permit program regulates municipal and industrial discharges to surface waters of the United States from their municipal separate storm sewer systems (MS4s). Under the NPDES program, all facilities that discharge pollutants into waters of the United States are required to obtain a NPDES permit. Requirements for stormwater discharges are also regulated under this program.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act acts in cooperation with the CWA to establish the SWRCB. The SWRCB is divided into nine regions, each overseen by an RWQCB. The SWRCB, and thus each RWQCB, is responsible for protecting California's surface waters and groundwater supplies. The Porter-Cologne Water Quality Control Act develops Basin Plans that designate the beneficial uses of California's rivers and groundwater basins. The Basin Plans also establish narrative and numerical water quality objectives for those waters. Basin Plans are updated every three years and provide the basis of determining waste discharge requirements, taking enforcement actions, and evaluating clean water grant proposals. The Porter-Cologne Water Quality Control Act is also responsible for implementing CWA Sections 401-402 and 303(d) to SWRCB and RWQCBs.

State Water Resources Control Board Waste Discharge Requirements

Waste discharges that can be exempted from the California Code of Regulations (CCR) requirements are issued waste discharge requirements (WDRs) and are regulated by the WDR Program. Typical discharge types include domestic or municipal wastewater, food processing related wastewater, and industrial wastewater.

Statewide General Construction Permit

Construction projects of one acre or more are regulated under the Construction General Permit, Order No. 2012-0006-DWQ, issued by the SWRCB. Under the terms of the permit, applicants must file permit registration documents with the SWRCB prior to the start of construction, including a Notice of Intent, risk assessment, site map, SWPPP, annual fee, and signed certification statement.

Sustainable Groundwater Management Act

In 2014, California enacted the Sustainable Groundwater Management Act (SGMA; Water Code Section 10720 et seq.). SGMA and related amendments to California law require all groundwater basins designated as high or medium priority in the DWR California Statewide Groundwater Elevation Monitoring (CASGEM) Program, and that are subject to critical overdraft conditions, must be managed under a new Groundwater Sustainability Plan (GSP) or a coordinated set of GSPs. High or medium priority basins that are not subject to a critical overdraft must be regulated under one or more GSPs by 2022. Where GSPs are required, one or more local Groundwater Sustainability Agencies (GSAs) must be formed to implement applicable GSPs. A GSA has the authority to require registration of groundwater wells, measure and manage extractions, require reports, and assess fees, and to request revisions of basin boundaries, including establishing new subbasins.

Water Quality Control Plan, Fifth Edition, for the Sacramento and San Joaquin River Basins

The CVRWQCB adopted a Water Quality Control Plan, Fifth Edition (revised May 2018), for the Sacramento and San Joaquin River Basins (Basin Plan) that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. Waste discharge requirements (WDRs) were adopted in order to attain the beneficial uses listed for the Basin Plan area. Water quality objectives are established for numerous constituents, including bacteria; chemical constituents such as trace elements, mercury, and methylmercury; pH; dissolved oxygen; pesticides; and salinity.

Impact Analysis

The following includes an analysis of environmental parameters related to *Hydrology and Water Quality* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur.

Would the Project:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?			X	
b) Substantially decease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			X	

Would the Project:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i) Result in substantial erosion or siltation on- or off-site;			X	
ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;			X	
iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or			X	
iv) Impede or redirect flood flows?			X	
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				X
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				X

a) *Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?*

The proposed project has the potential to temporarily degrade water quality due to increased erosion during demolition activities; however, as previously discussed under impact Section VII.b, to minimize soil erosion during site demolition, all demolition related activities, including debris stockpiling and debris offsite removal activities are required to meet Shasta County Code Chapter 18.10 and be conducted in accordance with the conditions set forth within Section E.10 "Construction Site Storm Water Runoff Control Program", of the MS4 permit, the construction general permit and applicable county requirements. Impacts would be less than significant in this regard.

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

The proposed project would not require new groundwater supplies for demolition activities and would not increase the amount of impervious surfaces in a manner that would prevent the infiltration of water into the soil. Approximately 29,355 square feet of imperious surfaces would be removed, increasing the amount of pervious area onsite. This is considered a beneficial impact on the Anderson Sub-basin. Therefore, there would be no impact on groundwater supplies or recharge.

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

i. *Result in substantial erosion or siltation on- or offsite:*

As previously discussed above, all demolition related activities, including debris stockpiling and debris offsite removal activities are required to meet Shasta County Code Chapter 18.10 and be conducted in accordance with the conditions set forth within Section E.10 "Construction Site Storm Water Runoff Control Program", of the MS4 permit, the construction general permit and applicable county requirements. Therefore, the potential for substantial soil erosion and loss of topsoil associated with the proposed project is considered to be less than significant.

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

No increase in stormwater runoff volume or rates would occur post-demolition as demolition activities would decrease the amount of impervious surface. Although some of the existing paved parking area will remain in place, approximately 29,355 square feet of imperious surfaces would be removed, increasing the amount of pervious areas onsite. Stormwater runoff would continue to be directed to an onsite drainage swale adjacent to Radio Lane. As a result, demolition activities would not result in a substantial increase in the rate or amount of surface runoff that would result in on or offsite flooding. Impacts would be less than significant in this regard.

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

Refer to previous impact discussions under X.a, X.c.i, and X.c.ii. Impacts would be less than significant.

iv. *Impede or redirect flood flows:*

Refer to previous impact discussion under X.c.ii. Impacts would be less than significant.

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

The threat of a tsunami wave is not applicable to inland areas; there is no potential for the generation of a seiche. As previously described above, the proposed project is not located within a FEMA Special Flood Hazard Area (FEMA, 2011).

Two major dams are located in the general vicinity of the proposed project: Shasta Dam and Whiskeytown Dam. The Shasta County General Plan does not contain dam inundation maps, however, according to Figure 4-5 and Figure 4-6 of the Health and Safety Element of the City of Redding General Plan, the proposed project is located within the Shasta Dam Failure inundation area (COR, 2000).

Uncontrolled releases from Shasta Dam, although very unlikely, would devastate the entire northern Central Valley including the proposed project. The Sacramento River and its tributaries would overtop banks and levees. Massive flooding in the lowlands along the river would occur and Interstate 5 (I-5), the main west coast transportation artery, would be affected by closure and possible structural damage. As a result, large portions of Redding and some areas of unincorporated Shasta County along the Sacramento River, including the proposed project site, would be directly affected by a dam overflow or failure. Although these are two different types of events, the results are the same - uncontrolled releases from Shasta Dam.

Dam Overflow

Although it is highly unlikely, a dam overflow is more likely than a dam failure. A dam overflow would be characterized by an "overtopping" of the dam. The design of the structure includes three large spillway gates to minimize the possibility of a true overtopping of the dam. During an intense and prolonged storm period that might bring water levels near the top of the dam, these spillway gates would be lowered allowing water to be discharged down the spillway. Controlling, or funneling, the discharge down the spillway prevents structural erosion along the base and sides of the dam, protects the turbine power generation plant at the base of the dam, and allows control of the release in cubic feet per second. Shasta Dam has never overflowed in its 60-year history (COR, 2015).

Dam Failure

A dam failure is less likely than a dam overflow. A dam failure would be characterized by a structural breach of the dam. Flooding and overtopping, earthquakes, release blockages, landslides, lack of maintenance, improper operation, poor construction, vandalism, or terrorism typify dam failures. California has had about 45 failures of nonfederal dams. These failures occurred for a variety of reasons, the most common being overtopping of earthen dams. Some of the other

reasons include specific shortcomings in the dams themselves or inadequate assessment of the surrounding geomorphologic characteristics. Shasta Dam is a federal dam, one of the largest concrete dams in the world, and secured firmly on bedrock.

Although there is a history of 45 dam failures within the State of California, most of the failures were earthen dams. Of the concrete dams that failed, all were of the "thin-arch" design. Shasta Dam is a federally controlled and inspected dam and is considered a "thick arch." Seismic activity is monitored, and tunnels throughout the dam itself allow inspectors to monitor for cracks and seepage. The dam is built on bedrock and is geomorphologically sound. The probability of a dam failure is extremely low (COR, 2015).

Conclusion

The project site, like many developed areas along in proximity to the Sacramento River, is located within the mapped inundation areas of Shasta Dam. As noted above, Shasta Dam has never overtopped, and the probability of dam failure is considered extremely low. In addition, the County maintains an Emergency Operations Center (EOC), including communication and coordination with USBR, to help coordinate information and resources should the County experience a large event such as dam overflow or failure.

While the proposed project would result in temporary demolition activities over a three week period, the risk of the release of pollutants from inundation of the project site as a result of a catastrophic failure or overtopping of Shasta Dam is not considered significant given the dam type, construction, the historical context of dam operations and management, and ongoing coordination between the County and USBR. In addition, refer to impact discussion under X.c.ii, above, regarding the minimization of floodplain impacts. Impacts would be less than significant.

e) *Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

The proposed project is located within the Sacramento River Basin. The *Water Quality Control Plan for the California Regional Water Quality Control Board Central Valley Region (Fifth Edition)* was prepared for the Sacramento River Basin and the San Joaquin River Basin. The Basin Plan includes water quality objectives for the San Joaquin River. Implementation of the plan is conducted through the NPDES permits and waste discharge requirements for pollution (CVRWQCB, 2018). Implementation of the proposed project would not result in a conflict with Basin Plan for the Sacramento River Basin.

As previously discussed above under *Environmental Setting,* the project site and surrounding area is located within the Sacramento River hydrologic region of northern California within the Redding Groundwater Basin (DWR, 2023). It is important to note that the RGWB is not an adjudicated basin. As the basin is not in overdraft, no legal pumping limit has been set; therefore, no overdraft mitigation efforts are currently underway. Though no safe yield has been established for the RGWB, groundwater modeling as part of the *Coordinated AB3030 Groundwater Management Plan* indicates that the RGWB is resilient to severe drought conditions and is able to recover with one year of normal rainfall (COR, 2021).

As previously mentioned above, the subject site is located within the Anderson Sub-basin of the RGWB that is managed by the EAGSA (DWR, 2023). Given the current and foreseeable status of the RGWB as a non-adjudicated basin, the proposed project's lack of groundwater impacts, and the continued management of the of the Anderson Sub-basin by the EAGSA, the proposed demolition would not result in adverse impacts to groundwater resources. Additionally, approximately 29,355 square feet of imperious surfaces would be removed from the site, increasing the amount of rechargeable area within the Anderson Sub-basin. This is considered a long-term beneficial impact. Therefore, there would be no impact on groundwater supplies or recharge. No impact would occur in this regard.

Mitigation Measures

No mitigation measures are required.

Findings

Based upon the review of the information above, implementation of the proposed project will have a less than significant impact with respect to *Hydrology and Water Quality*.

Documentation and References

COR (City of Redding). 2023. *City of Redding Geographic Information System*. [Online]: https://gispub.cityofredding.org/reddingmap/. Accessed July 25, 2023.

COR. 2021. City of Redding 2020 *Urban Water Management Plan*. November 2021.

COR. 2015. *Local Hazard Mitigation Plan*. November 2015.

CVRWQCB (Central Valley Regional Water Quality Control Board). 2018. *The Water Quality Control Plan (Basin Plan) for the California Regional Water Quality Control Board Central Valley Region (Fifth Edition), The Sacramento River Basin and The San Joaquin River Basin*. Revised May 2018.

DWR (California Department of Water Resources). 2023. *Sustainable Groundwater Management Act (SGMA) Data Viewer*. [Online]: https://sgma.water.ca.gove/webgis/. Accessed July 25, 2023.

DWR. 2004. *Sacramento River Hydrologic Region, Redding Groundwater Basin, Enterprise Subbasin Groundwater Bulletin 118*. Updated February 27, 2004.

FEMA (Federal Emergency Management Agency). 2011. *Flood Insurance Rate Map Panel #06089C1545G*. March 17, 2011.

RAWC (Redding Area Water Council). 1998. *Coordinated AB 3030 Groundwater Management Plan for the Redding Groundwater Basin*. Updated May 2007.

Shasta (Shasta County). 2017. *Shasta County and City of Anderson Multi-Jurisdictional Hazard Mitigation Plan*. November 16, 2017.

Shasta. 2004. *Shasta County General Plan*. September 2004.

XI. Land Use and Planning

This section of the Initial Study describes the impacts on land use and planning that would result from implementation of the proposed project, including consistency with relevant local land use plans and compatibility with surrounding land uses.

Environmental Setting

The project is situated in a developed area of central Redding west of the Sacramento River at 2680 Radio Lane (APN 048-140-007). The site is occupied by the County's Old Juvenile Hall Justice Center facility, which consists of administrative buildings, paved parking areas for staff and visitors, inmate classrooms, a basketball court, a garden, and a grass field for recreation. Most of the project site has been previously developed or altered from its natural state. Numerous ornamental trees and shrubs have been planted around buildings, and turf grasses have become established in the former recreation areas.

Surrounding Uses

The land use designation of the project site and adjoining properties are provided in Table 4-6, EXISITNG LAND USE AND ZONING DESIGNATIONS. Development within the vicinity includes a mix of County owned facilities, such as the Department of Probation and Shasta County Health and Human Services and residential uses south along Radio Lane. The County's operating juvenile facility is located immediately to the east of the project site.

Table 4-6
EXISTING LAND USE AND ZONING DESIGNATIONS

Direction from Site	Land Use Designation	Zoning
Project Site	"PF-I" (Public Facilities or Institutional)	"PF" (Public Facilities)
North	"PF-I" (Public Facilities or Institutional)	"PF" (Public Facilities)
East	"PF-I" (Public Facilities or Institutional)	"PF" (Public Facilities)
South	"RS" (Residential Single Family)	"RS-2" (Residential Single Family 2 Units per Acre
West	"PF-I" (Public Facilities or Institutional)	"PF" (Public Facilities)
Source: City of Redding. 2023.		

Regulatory Setting

Existing General Plan and Zoning

The City of Redding General Plan designates the proposed project site as "PF-I" (Public Facilities or Institutional). The project site is zoned "PF" (Public Facilities).

Impact Analysis

The following includes an analysis of environmental parameters related to *Land Use and Planning* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur.

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

a) *Physically divide an established community?*

The County proposes to abatement, demolition, remove, and dispose of the former 21,275 square foot, 56-bed Old Juvenile Hall Justice Center facility. Upon the completion of demolition and cleanup activities, a new security chain link fence will be installed around the perimeter of the property. No onsite development is proposed at this time. The existing garden will continue to be maintained and utilized by the Department of Probation. The proposed project does not include the creation of any road, ditch, wall, or other feature which would physically divide an established community. No impact would occur in this regard.

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

The proposed project would not conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. As discussed in each resource section of this Initial Study, the proposed project is consistent with applicable policies and regulations of the regulatory agencies identified in the Environmental Checklist Form of this Initial Study. Were necessary, mitigation measures are included to reduce impacts to less than significant levels. Therefore, the proposed project would not conflict with any plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect. Impacts would be less than significant.

Mitigation Measures

No mitigation measures are required.

Findings

In the course of the above evaluation, impacts associated with *Land Use and Planning* were found to not be significant because of the inability of a project of this scope to create such impacts or the absence of project characteristics producing effects of this type.

Documentation and References

COR (City of Redding). 2000. *City of Redding 2000 – 2020 General Plan*. October 3, 2000.
COR. 2023. *City of Redding Geographic Information System*. [Online]: https://gispub.cityofredding.org/reddingmap/. Accessed July 25, 2023.

XII. Mineral Resources

The purpose of this section of the Initial Study is to address potential impacts of the proposed project on mineral resources. This section also discusses the proposed project in the context of regional and local mineral resources and addresses the potential impacts to mineral resource deposits that may occur as a result of implementation of the proposed project.

Environmental Setting

A mineral resource is land on which known deposits of commercially viable mineral or aggregate deposits exist. This designation is applied to sites determined by the State Division of Mines and Geology as being a resource of regional significance and is intended to help maintain any quarrying operations and protect them from encroachment of incompatible uses. Mining and mineral resources are important to the economy of Shasta County. Each person in Shasta County requires about 20 tons of freshly mined non-fuel minerals each year. This amount includes about 8 tons of sand and gravel to make concrete for building homes, schools, offices, factories, bridges, and roads (Shasta, 2004).

The California Department of Conservation's (DOC) Division of Mine Reclamation (DMR) compiles data on the status of mines and the commodities produced. The California Geological Survey (CGS) produces Mineral Land Classification (MLC) studies that identify areas with potentially important mineral resources that should be considered in local and regional planning. Based on maps prepared by the DOC and CGS, this area of Shasta County does not contain oil, natural gas, or geothermal fields (DOC, 2023).

Impact Analysis

The following includes an analysis of environmental parameters related to *Mineral Resources* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur.

Would the Project:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?				X
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local General Plan, specific plan, or other land use plan?				X

a) *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?*

The project would not 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. There are no known mineral resources of regional value located on or near the proposed project site. No impact would occur in this regard.

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?*

The proposed project would not result in the loss of availability of a locally-important mineral resource recovery site delineated on a County's or City's General Plan or other land use plan. The proposed project is not located within or adjacent to a specific plan adopted by the County or the City of Redding. The proposed project is not identified in either

General Plan as having any known mineral resource value, or as being located within any "Mineral Resource Buffer" district. No impact would occur in this regard.

Mitigation Measures

No mitigation measures are required.

Findings

In the course of the above evaluation, impacts associated with *Mineral Resources* were found to not be significant because of the inability of a project of this scope to create such impacts or the absence of project characteristics producing effects of this type.

Documentation and References

COR (City of Redding). 2000. *City of Redding 2000 – 2020 General Plan*. October 3, 2000.

COR. 2023. *City of Redding Geographic Information System*. [Online]: https://gispub.cityofredding.org/reddingmap/. Accessed July 25, 2023.

DOC (Department of Conservation). 1997. *Mineral Land Classification of Alluvial Sand and Gravel, Crushed Stone, Volcanic Cinders, Limestone, and Diatomite within Shasta County, California – DMG Open File Report 97-03*. 1997.

DOC. 1974. *Mines and Mineral Resources of Shasta County, California, County Report 6*. 1974.

DOC. 2023. *The CGS Information Warehouse: MLC.* [Online]: https://maps.conservation.ca.gov/cgs/informationwarehouse/mlc/. Accessed July 25, 2023.

Shasta (Shasta County). 2004. *Shasta County General Plan*. September 2004.

Shasta. 2023. *Shasta County Geographic Information System*. [Online]: https://maps.shastacounty.gov/ShastaCountyMap/ Accessed July 25, 2023.

XIII. Noise

The purpose of this section of the Initial Study is to evaluate noise source impacts to onsite and surrounding land uses as a result of project implementation.

Environmental Setting

The proposed project is situated in a developed area of west-central Redding west of the Sacramento River. Development within the vicinity includes a mix of County owned facilities, such as the Department of Probation and Shasta County Health and Human Services and residential uses south along Radio Lane. Sensitive receptors near the project site include residences to the south (closest residence approximately 150 feet to the south) and the new juvenile rehabilitation facility directly to the east.

Regulatory Setting

This section summarizes current State and local regulations relevant to the review of *Noise* for this project. Ordinances, regulations, or standards that are applicable to the environmental review of potential impacts related to noise include the following:

California Government Code

California Government Code Section 65302 (f) mandates that the legislative body of each county and city adopt a noise element as part of its comprehensive general plan. The local noise element must recognize the land use compatibility guidelines established by the State Department of Health Services. The guidelines rank noise land use compatibility in terms of "normally acceptable", "conditionally acceptable", "normally unacceptable", and "clearly unacceptable" noise levels for various land use types. Single-family homes are "normally acceptable" in exterior noise environments up to 60 CNEL and "conditionally acceptable" up to 70 CNEL. Multiple-family residential uses are "normally acceptable" up to 65 CNEL and "conditionally acceptable" up to 70 CNEL. Schools, libraries, and churches are "normally acceptable" up to 70 CNEL, as are office buildings and business, commercial, and professional uses.

Title 24 - Building Code

The state's noise insulation standards are codified in the California Code of Regulations, Title 24: Part 1, Building Standards Administrative Code, and Part 2, California Building Code. These noise standards are applied to new construction in California for the purpose of interior noise compatibility from exterior noise sources. The regulations specify that acoustical studies must be prepared when noise-sensitive structures, such as residential buildings, schools, or hospitals, are located near major transportation noise sources, and where such noise sources create an exterior noise level of 65 dBA CNEL or higher. Acoustical studies that accompany building plans must demonstrate that the structure has been designed to limit interior noise in habitable rooms to acceptable noise levels. For new residential buildings, schools, and hospitals, the acceptable interior noise limit for new construction is 45 dBA CNEL.

Shasta County General Plan

The Shasta County General Plan Noise Element has the following Exterior Noise Standards, shown in Table 4-7, NOISE LEVEL PERFORMANCE STANDARDS FOR NEW PROJECTS. The Noise Element establishes an Hourly Leq of 55 dB as the daytime standard acceptable exterior noise level and an Hourly Leq of 50 dB for nighttime exterior noise levels. These performance standards are applicable to new projects affected by or including non-transportation noise sources. These standards are not applicable to temporary construction activities and the County does not have any standards related to construction noise in either the General Plan or County Code.

Table 4-7
NOISE LEVEL PERFORMANCE STANDARDS FOR NEW PROJECTS

Noise Level Descriptor	Day Time (7 a.m. to 10 p.m.)	Nighttime (10 p.m. to 7 a.m.)
Hourly L_{eq}, dB	55	50
Source: Shasta County General Plan. September 2004.		

Impact Analysis

The following includes an analysis of environmental parameters related to *Noise* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur.

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

This section discusses the noise source impacts to onsite and surrounding land uses as a result of project implementation. This includes evaluating short-term demolition impacts as well as long-term project buildout impacts.

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?*

Demolition activities generally are temporary and have a short duration, resulting in periodic increases in the ambient noise environment. As described throughout this document, implementation of the proposed project would occur over a period of approximately three weeks and would include the abatement, demolition, removal, and disposal of a former juvenile hall facility. Ground-borne noise and other types of construction-related noise impacts typically occur during the demolition and grading phases. These phases of construction have the potential to create the highest levels of noise. Activities and equipment involved in the demolition of the former juvenile hall facility are estimated to generate maximum noise levels ranging from 85 to 89 dBA at a distance of 50 feet (FHWA, 2006). As described in the *Regulatory Setting* section, the County does not have any standards related to construction noise in either the General Plan or County Code. However, the estimated noise levels from project implementation have the potential to cause significant impacts to sensitive receptors surrounding the project site without mitigation.

Sensitive receptors near the project site that could be impacted by noise from the proposed demolition activity include residences to the south (closest residence approximately 150 feet to the south) and the new juvenile rehabilitation facility directly to the east. Given its temporary nature, the proposed demolition activities would result in a short-term noise impact in the vicinity of the project site. To mitigate the noise impacts from short-term construction activities,

Mitigation Measure N-1 has been required for the proposed project. Mitigation Measure N-1 limits construction activities to the hours between 7:00 a.m. and 6:00 p.m. Monday through Friday. No demolition or other activities would be allowed on weekends or holidays. With implementation of Mitigation Measure N-1, impacts to nearby sensitive receptors from construction activities would be less than significant.

b) *Generation of excessive ground-borne vibration or ground-borne noise levels?*

The proposed project's demolition activity has the potential to result in minor groundborne vibration and groundborne noise primarily from the use of off-road heavy-duty equipment. The closest land uses potentially impacted by groundborne vibration and groundborne noise include residences to the south (closest residence approximately 150 feet to the south) and the new Juvenile Rehabilitation Facility directly to the east. Ground vibrations from the use of off-road heavy-duty equipment rarely reaches the levels that can damage structures. Any potential damage would typically be due to direct proximity to a structure, which would not occur during the proposed demolition activities. Pile-driving during construction generates the highest levels of vibration; however, pile-driving would not occur during the proposed demolition. Although minor vibration may occur from the proposed demolition activities at the nearest land uses, it is not anticipated that project implementation would result in the generation of excessive groundborne vibration or groundborne noise levels. Therefore, the proposed project would result in a less than significant impact in this regard.

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?*

The closest public use airport to the project site is the Benton Airpark, which is just over 2 miles northwest of the project site. As described throughout this document, implementation of the proposed project would occur over a period of approximately three weeks and would include the abatement, demolition, removal, and disposal of the Old Juvenile Hall Justice Center facility. Since the project would not result in people residing at the project site and the proposed demolition work would only occur for a period of approximately three weeks, it is not anticipated that the project would result in exposing people to excessive noise levels from the Benton Airpark. Impacts would be less than significant in this regard.

Mitigation Measures

The following mitigation measure has been developed to reduce potential impacts related to *Noise* to less than significant levels:

Mitigation Measure N-1

The demolition contractor shall be responsible for complying with the following measures during demolition activities to reduce potential noise impacts:

- Demolition activities shall be restricted to the hours between 7:00 a.m. and 6:00 p.m. Monday through Friday. Demolition activities shall also be prohibited on weekends and holidays.

Findings

Based upon the review of the information above, with implementation of mitigation measures the proposed project will have a less than significant impact with respect to *Noise*.

Documentation and References

FHWA (Federal Highway Administration). 2006. *FHWA Highway Construction Noise Handbook, Final Report.* August. [Online]: https://rosap.ntl.bts.gov/view/dot/8837/dot_8837_DS1.pdf?%20.

Shasta (Shasta County). 2004. *Shasta County General Plan*. September 2004.

XIV. Population and Housing

This section addresses potential impacts of the project on population, housing, and employment at the project site and provides an overview of current population estimates and projected population growth.

Environmental Setting

According to the Shasta Regional Transportation Agency's 2018 Regional Transportation Plan (RTP) for Shasta County, population in the County is anticipated to grow at a rate of 0.8 percent per year, with an estimated population of 214,364 persons in Shasta County by 2035 (SRTA, 2018).

The County of Shasta's population is currently estimated at 179,436 (DOF, 2023a). Between January 2022 and January 2023, the County's population shrunk from 180,651 to 179,436 (DOF, 2023a). This reflects a reduction of about -0.7 percent compared to about -0.6 percent for Redding. Redding's population consists of approximately 51.5 percent of the County's population (DOF, 2023a). Shasta County's population was 180,651 in 2022 and has decreased by less than one percent annually since then (DOF, 2023b). Shasta County has an estimated 80,211 housing units, with a vacancy rate of 8.6% and an average of 2.40 persons per household (DOF, 2023b). Shasta County's growth rate is consistent with the growth rates of the cities within it.

Impact Analysis

The following includes an analysis of environmental parameters related to *Population and Housing* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur.

Would the Project:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Induce substantial unplanned population growth in an area, either directly *(for example, by proposing new homes and businesses)* or indirectly *(for example, through extension of roads or other infrastructure)*?				**X**
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				**X**

a) *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)?*

Proposed demolition activities would not induce substantial unplanned population growth in an area, either directly or indirectly. As a result, the proposed project would not induce unplanned population growth and does not propose the extension of any new roads or utilities not anticipated by the City of Redding or Shasta County general plans. No impact would occur in this regard.

b) *Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*

The proposed demolition project would not displace people or existing housing. The proposed project does not include the demolition of any existing housing. No impact would occur in this regard.

Mitigation Measures

No mitigation measures are required.

Findings

In the course of the above evaluation, impacts associated with *Population and Housing* were found to not be significant because of the inability of a project of this scope to create such impacts or the absence of project characteristics producing effects of this type.

Documentation and References

DOF (California Department of Finance). 2023a. *Report E-1 Population Estimates for Cities, Counties, and the State January 1, 2022 and 2023.* Accessed July 26, 2023.

DOF. 2023b. *Table E-5: City/County Population and Housing Estimates*. Accessed July 26, 2023.

SRTA (Shasta Regional Transportation Agency). 2018. *Regional Transportation Plan and Sustainable Communities Strategy for the Shasta Region*. October 9, 2018.

XV. Public Services

This section of the Initial Study describes the affected environment for public services that serve the project area. It also describes the impacts on existing public services that would result from implementation of the proposed project and mitigation measures, if necessary, that would reduce these impacts.

Environmental Setting

Fire Protection

The project site does not fall within a State Responsibility Area (SRA). The proposed project is within Redding Fire Department (RFD) Fire Station 3 response area (COR, 2023). Fire Station No. 3 is located approximately one mile northwest of the proposed project at 4255 Westside Road.

Police Protection

Law enforcement within the area of the proposed project is provided primarily by the City of Redding Police Department (RPD). The project site is located within RPD's Beat 4.

Schools

The project site is located in the Redding Elementary School District and Shasta Union High School District and located approximately 0.21 miles north of Bonny View Elementary School.

Parks

Shasta County has a variety of recreational options available to its residents and visitors. The county contains extensive State and federal public lands, regional serving parks, and county public land (Balls Ferry Fishing Access, Battle Creek Fishing Access, French Gultch Park, Hat Creek Park, Lake Britton Fishing Access, Lake McCumber, and Pit River. In addition, there are tens of thousands of acres of rivers, lakes, forests, and other public land available for recreation in Lassen National Park, the Shasta and Whiskeytown National Recreation Areas, the National Forests, and other public land administered by Bureau of Land Management. There are no existing regional or local community parks in the immediate vicinity of the project site. No neighborhood parks are located within the immediate vicinity of the proposed project.

Other Public Facilities

Shasta County provides library services throughout the County, including in the City of Redding. The County has three library branches: the Burney Branch Library (located at 37038 Siskiyou Street), the Anderson Branch Library (located at 3200 West Center Street), and the Redding Branch Library (located at 1100 Parkview Avenue). The Burney Branch Library opened in 1949 and was the first of the Shasta County library branches. The Redding Branch library is the most recent library addition, having opened on March 3, 2007.

Impact Analysis

The following includes an analysis of environmental parameters related to *Public Services* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur.

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:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Fire Protection?				X
Police Protection?				X
Schools?				X
Parks?				X
Other Public Facilities?				X

Fire Protection

As described above, the proposed project is located approximately one mile from the nearest fire station, RFD Station 3. Two fire hydrants are located onsite and will be available for fire suppression if needed. The proposed temporary demolition activities would not increase the response time required for RFD and not create an additional burden on exiting fire facilities. No impact would occur in this regard.

Police Protection

Implementation of the proposed project would not result in an increase in demand for law enforcement resulting in new or expanded law enforcement facilities. As the proposed project would neither increase the population nor result in employment gains, project implementation would not result in the need for an increase in law enforcement or related facilities. No impact would occur in this regard.

Schools

The project site is located in the Redding Elementary School District and Shasta Union High School District. The proposed project would not result in the construction of new residential uses; therefore, the proposed project would not directly require the construction of additional school facilities and/or expansion of existing school facilities. No impact would occur in this regard.

Parks

Refer to discussion under Section XVI, RECREATION, below. The project will not cause a physical deterioration of an existing park facility or cause an adverse physical impact associated with a new park facility. No impact would occur in this regard.

Other Public Facilities

The proposed project does not involve a substantial change in the land use, does not substantially increase the numbers of people employed in the region, and does not create or require new housing or related facilities, an increased demand on public facilities is unlikely to occur. No impact would occur in this regard.

Mitigation Measures

No mitigation measures are required.

Findings

In the course of the above evaluation, impacts associated with *Public Services* were found to not be significant because of the inability of a project of this scope to create such impacts or the absence of project characteristics producing effects of this type.

Documentation and References

CAL FIRE (California Department of Forestry and Fire Protection). 2023. *Fire Hazard Severity Zones.* [Online]: https://egis.fire.ca.gov/FHSZ/. Accessed July 25, 2023.

COR (City of Redding). 2023. *City of Redding Geographic Information System*. [Online]: https://gispub.cityofredding.org/reddingmap/. Accessed July 25, 2023.

Shasta (Shasta County). 2004. *Shasta County General Plan*. September 2004.

Shasta. 2023. *Shasta County Geographic Information System*. [Online]: https://maps.shastacounty.gov/ShastaCountyMap/ Accessed July 25, 2023.

XVI. Recreation

This section of the Initial Study discusses any increased demand for various recreational facilities and identifies any potential need for new recreational facilities generated by the proposed project. This section also describes the recreational resources within the project area.

Environmental Setting

Regional Recreational Facilities

A regional recreation facility is designed to appeal to residents from throughout the county and beyond. Regional facilities provide access to unique natural or cultural features and/or regional-scale recreation facilities. They can accommodate large group activities and often have infrastructure to support large gatherings such as tournaments, special events and festivals. Regional facilities enhance the economic vitality and identity of the region. These facilities may also include significant green space to preserve unique natural areas, tree canopy, riverfront corridors, wetlands, and remnant landscapes. These facilities include Shasta-Trinity National Forest, Whiskeytown National Recreation Area, Lassen Volcanic National Park, U.S. Department of Interior, Bureau of Land Management (BLM) holdings, McArthur-Burney Falls Memorial State Park, Castle Crags State Park, Shasta Historic Park, and several fishing access areas.

In addition to the above noted regional recreational facilities, multiple jurisdictions manage hundreds of miles of off-road trails within Shasta County. Shasta County provides an array of recreational opportunities through federal, State and County parks, forests, and fishing areas. These jurisdictions include the BLM, U.S. Forest Service (USFS), National Park Service (NPS), California State Parks, City of Redding, and the McConnell Foundation.

Rural Community Parks

There are no existing regional or local community parks in the immediate vicinity of the proposed project.

City Parks

There are no existing city parks in the immediate vicinity of the proposed project.

Impact Analysis

The following includes an analysis of environmental parameters related to *Recreation* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur.

Would the Project:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				X
b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X

a) *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?*

The proposed project does not result in an increase in housing or population in the City or County resulting in an increased use of neighborhood or regional parks. No impact would occur in this regard.

b) *Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

The proposed project does not include recreational facilities, or would it require the construction or expansion of recreational facilities which might have an adverse effect on the environment. Implementation of the proposed project would not result in substantially increased use of any area recreational facilities and would therefore not require construction of new or expansion of any other existing recreational facilities. No impact would occur in this regard.

Mitigation Measures

No mitigation measures are required.

Findings

In the course of the above evaluation, impacts associated with *Recreation* were found to not be significant because of the inability of a project of this scope to create such impacts or the absence of project characteristics producing effects of this type.

Documentation and References

COR (City of Redding). 2000. *City of Redding 2000 – 2020 General Plan*. October 3, 2000.
COR. 2023. *City of Redding Geographic Information System*. [Online]: https://gispub.cityofredding.org/reddingmap/. Accessed July 25, 2023.
Shasta (Shasta County). 2009. *Parks, Trails, and Open Space Plan*. August 2009.
Shasta. 2004. *Shasta County General Plan*. September 2004.
Shasta. 2023. *Shasta County Geographic Information System*. [Online]: https://maps.shastacounty.gov/ShastaCountyMap/ Accessed July 25, 2023.

XVII. Transportation

The purpose of the evaluation is to address traffic and transportation impacts of the proposed project on surrounding streets and intersections, as well as provide an assessment of Vehicle Miles of Travel (VMT). This section also discusses the proposed project in the context of roadway, bicycle, and pedestrian safety; emergency access; and potential hazards due to geometric design features as a result of implementation of the proposed project.

Environmental Setting

Local Access

Local access to the project site is provided via East Bonnyview from the south to Radio Lane. From the east, access to Radio Lane is provided via Eastside Road. Direct site access is provided via Radio Lane.

Bicycle Facilities

There are no existing bicycle facilities along Radio Lane. A future Class II bicycle lane is proposed along East Bonnyview and Radio Lane (COR, 2018).

Transit Service

Transit service in the project vicinity is provided by the Redding Area Bus Authority (RABA) Route 7. RABA provides one bus stop on Radio Lane across from the entrance to the project site (RABA, 2023).

Regulatory Setting

This section summarizes current State and local regulations relevant to the review of *Transportation* for this project. Ordinances, regulations, or standards that are applicable to the environmental review of potential impacts related to transportation include the following:

Shasta County Regional Transportation Plan

Shasta Regional Transportation Agency (SRTA) is the federally-designated metropolitan planning organization (MPO) and state-designated regional transportation planning agency (RTPA) for Shasta County. SRTA is required to prepare and adopt a comprehensive regional transportation plan (RTP) covering a minimum 20-year planning horizon. The RTP for Shasta County is updated every four years. The purpose of the RTP is to "encourage and promote the safe and efficient management, operations, and development of a regional intermodal transportation system that, when linked with appropriate land use planning will serve the mobility needs of goods and people" (California Transportation Commission 2010 RTP Guidelines). The RTP is implemented by way of shorter-term transportation improvement and work programs.

Senate Bill 743

Passed in 2013, SB 743 changes the focus of transportation impact analysis in the California Environmental Quality Act (CEQA) from measuring impacts to drivers, to measuring the impact of driving. The change has been made by replacing level of service (LOS) with VMT. This shift in transportation impact focus is intended to better align transportation impact analysis and mitigation outcomes with the State's goals to reduce greenhouse gas (GHG) emissions, encourage infill development, and improve public health through more active transportation. Level of service or other delay metrics may still be used to evaluate the impact of projects but is not used to determine a significant impact under CEQA.

Impact Analysis

With the introduction of the California Governor's Office of Planning and Research (OPR) Technical Advisory, VMT has become an important indicator for determining if a new development will result in a "significant transportation impact" under CEQA. Passed in 2013, SB 743 changes the focus of transportation impact analysis in CEQA from measuring impacts to drivers, to measuring the impact of driving. The change has been made by replacing level of service (LOS) with VMT. This shift in transportation impact focus is intended to better align transportation impact analysis and mitigation outcomes with the State's goals to reduce greenhouse gas (GHG) emissions, encourage infill development, and improve public health through more active transportation. Level of service or other delay metrics may still be used to evaluate the impact of projects but is not used to determine a significant impact under CEQA.

The following includes an analysis of environmental parameters related to *Transportation* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur.

Would the Project:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?			X	
b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, Subdivision (b)?			X	
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	
d) Result in inadequate emergency access?			X	

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

Project demolition activities would be contained within the project site and would not interfere with existing vehicle, transit, bicycle, and pedestrian circulation other than adding a small amount of temporary vehicle and truck trips going to and coming from the project site. Upon completion of site demolition, there would not be an increase in traffic beyond pre-project levels. Therefore, demolition activities would not generate additional vehicle, transit, pedestrian, or bicycle use, so there would be no conflicts with programs, plans, ordinances, or policies related to circulation.

If determined necessary by the City of Redding through the Commercial Demolition Permit process, a traffic control plan or similar information deemed acceptable by the City, would be prepared by the demolition contractor. Adequate local and emergency access to adjacent uses is required to be provided at all times. With implementation of Mitigation Measure TRF-1, impacts would be less than significant.

b) *Conflict or be inconsistent with CEQA Guidelines Section 15064.3, Subdivision (b)?*

CEQA Guidelines Section 15064.3, subdivision (b), focuses on newly adopted criteria (vehicle miles traveled) for determining the significance of transportation impacts. It is further divided into four subdivisions: (1) land use projects, (2) transportation projects, (3) qualitative analysis, and (4) methodology. The proposed project involves demolition of existing structures that would generate temporary construction-related traffic, and therefore would be categorized under subdivision (b)(3), qualitative analysis. Subdivision (b)(3) recognizes that lead agencies may not be able to quantitatively estimate vehicle miles traveled for every project type. In those circumstances, this subdivision encourages

lead agencies to evaluate factors such as the availability of transit, proximity to other destinations, and other factors that may affect the amount of driving required by the project.

Demolition-related trips are temporary and would not generate permanent trips. Further, the project construction would be consistent with construction activities in terms of the temporary nature of activities, trip generation characteristics, and the types of vehicles and equipment required. Even though some of the workers could carpool to the site, managing worker and truck trip lengths for the construction projects is not feasible because of the short duration (i.e., three weeks) of individual demolition activities.

Over the course of demolition, the number of haul trips would be approximately 120 local haul trips. Per OPR, heavy vehicle traffic is not required to be included in the estimation of a project's VMT. As noted above, worker and truck trips would generate VMT, but once construction is completed, the construction-related traffic would cease, and VMT would return to pre-project conditions. Measures to reduce the VMT generated by construction workers and trucks are limited, and there are no thresholds or significance criteria for temporary, construction-related VMT. Additionally, construction-related VMT would be temporary and short term. Further, it should be noted that OPR does not require quantitative assessment of temporary construction traffic. As mentioned previously, because the project would not generate any new permanent maintenance trips, the proposed project would have a less than significant VMT impact.

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

Demolition activities would be confined to the project site and would not result in any changes in road geometry or new uses. As a result, demolition activities would not substantially increase hazards to vehicle safety due to increased traffic at locations with geometric design features (e.g., sharp curves or dangerous intersections). The project does not introduce incompatible users (e.g., farm equipment) to a roadway or transportation facility not intended for those users. The project's impact with regard to roadway design and users is not considered significant. Impacts would be less than significant.

d) *Result in inadequate emergency access?*

The project site is located in an established, developed area with ample access for emergency service providers. The proposed project does not involve a use or activity that could interfere with long-term emergency response or emergency evacuation plans for the area. Impacts would be less than significant in this regard.

Mitigation Measures

The following mitigation measure has been developed to reduce potential impacts related to *Transportation* to less than significant levels:

Mitigation Measure TRF-1

If required by the City of Redding, prior to initiation of demolition activities onsite, the demolition contractor shall develop a traffic control plan and submit the plan to the City of Redding Public Works Department. The plan shall identify temporary lane, sidewalk, or transit stop closures and provide information regarding how access and connectivity will be during demolition activities. The plan shall include details regarding traffic controls that would be employed, including signage, detours, and flaggers. The traffic control plan shall be implemented by the contractor during to allow for the safe passage of vehicles, pedestrians, and cyclists along Radio Lane.

Findings

Based upon the review of the information above, implementation of the proposed project, with implementation of mitigation, will have a less than significant impact with respect to *Transportation*.

Documentation and References

COR (City of Redding). 2010. *Active Transportation Plan*. April 2018.

OPR (Governor's Office of Planning and Research). 2018. *Technical Advisory on Evaluating Transportation Impacts in CEQA*. December 2018.

RABA (Redding Area Bus Authority). 2023. *Redding Area Bus Authority (RABA) Ride Guide*. 2023.

SRTA (Shasta County Regional Transportation Agency). 2018. *Regional Active Transportation Plan.* Updated August 2019.

XVIII. Tribal Cultural Resources

This section of the Initial Study describes the affected environment and regulatory setting for Tribal Cultural Resources (TCRs) on the project site. Ethnographic information is presented for the Wintu, the larger cultural group identified for the project location.

Environmental Setting

Ethnographic Context

At the time of European-American contact (1830-1840), the project vicinity appears to have been inhabited by the Dau-nom (Baldhill) Wintu. The Wintu belong to the family of Penutian speakers, a linguistic stock whose members are found throughout California within four main language families including Wintuan, Maiduan, Yokutsan, and Utian (Moratto 1984). Wintuan language subgroups consist of Wintu (Northern Wintuan), Nomlaki (Central Wintuan), and Patwin (Southern Wintuan) (Kroeber 1925). The Wintu were further divided into nine major groups based upon their geographic location, including the Dau-nom subgroup, which was the southernmost of these (DuBois 1935). According to DuBois, the Dau-nom culture shared traits with both the Wintu and the Nomlaki, and they had friendly relations with both the Elpom (Keswick) Wintu to the north of them and the Nomlaki to the south (DuBois 1935).

The Wintu diet/subsistence strategy was similar to many other California groups, and was focused on three predictable resources-acorns, deer and salmon-all of which were of high nutritional value, easily stored, and dependably available on a seasonal basis. The Wintu lived in permanent villages during the winter, subsisting mainly on stored foods. In the late spring and summer months, they moved upland to temporary resource procurement camps (in brush shelters) usually located no more than three to four days' walk from the main village. Food resources were periodically returned to the base camp for storage, which was guarded by those unable to participate in the gathering rounds (DuBois 1935; La Pena 1978). Because the streams within their eastern territory were rich in salmon, the Dau-nom Wintu would fish on the Sacramento River and its tributaries during the spring and fall runs and would trade salmon-flour (DuBois 1935). In addition, Dau-nom Wintu relied on smaller game, and participated in communal rabbit drives and net-hunting of birds such as quail and waterfowl (DuBois 1935).

Regulatory Setting

This section summarizes current State and local regulations relevant to the review of *Tribal Cultural Resources* for this project. Ordinances, regulations, or standards that are applicable to the environmental review of potential impacts related to Tribal Cultural Resources include the following:

Assembly Bill 52

Assembly Bill 52 (AB 52) amended CEQA to require that: 1) a lead agency provide notice to any California Native American tribes that have requested notice of projects proposed by the lead agency; and 2) for any tribe that responded to the notice within 30 days of receipt with a request for consultation, the lead agency must consult with the tribe. Topics that may be addressed during consultation include tribal cultural resources, the potential significance of project impacts, type of environmental document that should be prepared, and possible mitigation measures and project alternatives.

Pursuant to AB 52, Section 21073 of the Public Resources Code defines California Native American tribes as “a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of the Statutes of 2004.” This includes both federally and non-federally recognized tribes. Section 21074(a) of the Public Resource Code defines TCRs for the purpose of CEQA as:

1) Sites, features, places, cultural landscapes (geographically defined in terms of the size and scope), sacred places, and objects with cultural value to a California Native American tribe that are either of the following:

   (a) included or determined to be eligible for inclusion in the California Register of Historical Resources; and/or

(b) included in a local register of historical resources as defined in subdivision (k) of Section 5020.1; and/or

2) 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 Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

Because criteria (a) and (b) also meet the definition of a Historical Resource under CEQA, a TCR may also require additional consideration as a Historical Resource. TCRs may or may not exhibit archaeological, cultural, or physical indicators.

Recognizing that California tribes are experts in their tribal cultural resources and heritage, AB 52 requires that CEQA lead agencies provide tribes that requested notification an opportunity to consult at the commencement of the CEQA process to identify TCRs. Furthermore, because a significant effect on a TCR is considered a significant impact on the environment under CEQA, consultation is used to develop appropriate avoidance, impact minimization, and mitigation measures.

Tribal Consultation

Consultation and correspondence with various culturally affiliated Tribal groups and agencies were conducted in accordance with Public Resources Code (PRC) Section 21080.3.1 (AB 52). On June 22, 2023, the County initiated environmental review under the California Environmental Quality Act (CEQA) for the proposed Juvenile Hall Justice Center Demolition project. The County sent a certified project notification letter to the Wintu Tribe of Northern California and the Winnemem Wintu Tribe, each a California Native American Tribe that is traditionally and culturally affiliated with the geographic area of the proposed project, and the Redding Rancheria, on June 22, 2023, pursuant to PRC Section 21080.3.1, notifying that the project was under review and to provide the Tribes 30 days from the receipt of the letter to request consultation on the project in writing. No responses were received requesting initiation of consultation under the provisions of AB 52.

Impact Analysis

The following includes an analysis of environmental parameters related to *Tribal Cultural Resources* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur.

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:	**Potentially Significant Impact**	**Less-Than-Significant With Mitigation Incorporated**	**Less-Than-Significant Impact**	**No Impact**
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), or		X		
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 Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.		X		

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)?*

No TCRs were identified within or immediately adjacent to the project area and, therefore, the proposed project would not result in a significant impact to known TCRs. Impacts to unknown TCRs that may be discovered would be less than significant with the incorporation of Mitigation Measure TCR-1, below. Impacts would be less than significant.

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 Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.*

As described above, no known TCRs have been identified (as defined in PRC Section 21074) within the project area. Therefore, the project would not cause a significant adverse change in the significance of a TCR that is either listed in, or eligible for listing in, the CRHR, or in a local register of historical resources as defined in PRC Section 5020.1(k). The proposed project would not cause a substantial adverse effect to a known TCR. Mitigation Measures CR-1 and CR-2 address the inadvertent discovery of cultural resources and human remains during construction. Impacts would be less than significant.

Mitigation Measures

The following mitigation measures have been developed to reduce potential impacts related to *Tribal Cultural Resources* to less than significant levels:

Mitigation Measure TCR-1

Unanticipated Discovery - If any suspected TCRs are discovered during ground-disturbing construction activities, all work shall cease within at least 50 feet of the find. The County shall invite a Tribal Representative from a California Native American tribe that is traditionally and culturally affiliated with the geographic area to make recommendations about whether or not the discovery represents a TCR (PRC Section 21074) and, if so, to make recommendations for culturally appropriate treatment. The contractor shall implement any measures determined by the County to be necessary. Work at the discovery location cannot resume until the treatment has been implemented to the satisfaction of the County.

In addition, refer to Mitigation Measure CR-1 and CR-2 in Section V, CULTURAL RESOURCES.

Findings

In the course of the above evaluation impacts associated with *Tribal Cultural Resources* were found to be less than significant with implementation of mitigation. Mitigation measures for the protection of currently unknown but potentially discoverable resources are also provided for in Section V, CULTURAL RESOURCES.

Documentation and References

Daly (Daly & Associates). 2023. *Historical Resource Evaluation of Old Shasta County Juvenile Justice Center, 2680 Radio Lane, Shasta County, California*. August 2023.

ENPLAN. 2010. *Cultural Resources Inventory for the Shasta County Juvenile Hall Expansion Project on Radio Lane, Shasta County, California*. June 1, 2010.

XIX. Utilities and Service Systems

This section of the Initial Study addresses the proposed project's potential impacts on certain utilities and services: electric, water, wastewater, stormwater, and solid waste.

Environmental Setting

Water

The City of Redding provides water service to all residential, industrial, and commercial users within a 58-square-mile water service area. The proposed project is located within the Redding Groundwater Basin (RGWB). The RGWB underlies approximately 544 square miles in the north end of the Sacramento Valley. As described in the City of Redding 2020 Urban Water Management Plan, the RGWB is not an adjudicated basin (COR, 2021). As the basin is not in overdraft, no legal pumping limit has been set; therefore, no overdraft mitigation efforts are currently underway.

Wastewater

The City of Redding is the sole provider of sanitary sewer service in the project area. Wastewater in the project area is collected and treated at the City's Clear Creek Wastewater Treatment Plant.

Stormwater

There are no surface water resources within the boundary of the subject site. Onsite stormwater runoff is currently directed to an onsite drainage swale adjacent to Radio Lane.

Solid Waste

Solid waste generated by the proposed project would be disposed of at the West Central Sanitary Landfill located south of the community of Igo, 9.2 miles west of State Route 273 (SR-273). Through an agreement with Shasta County, the landfill receives all residential, commercial, and industrial solid waste generated within the City. Total capacity of the landfill is 13 million cubic yards (cy) with a remaining capacity of 5.2 million cy.

Utilities

Redding Electric Utility (REU) currently provides electrical services to the City of Redding, while natural gas is provided by Pacific Gas & Electric Company (PG&E). REU has overhead electric lines running east-west along Radio Lane. Currently, there are lines that serve the surrounding area with the nearest gas distribution facilities located along Radio Lane.

Regulatory Setting

This section summarizes current State and local regulations relevant to the review of *Utilities and Service Systems* for this project. Ordinances, regulations, or standards that are applicable to the environmental review of potential impacts related to utilities and service systems include the following:

California Integrated Waste Management Act

The California Integrated Waste Management Act of 1989, or Assembly Bill (AB) 939, required the implementation of integrated waste management plans, and mandated that local jurisdictions divert at least 50 percent of all solid waste generated (from 1990 levels), beginning January 1, 2000, and divert at least 75 percent by 2010. Projects that would have an adverse effect on waste diversion goals are required to include waste diversion mitigation measures to assist in reducing these impacts to less than significant levels. With the passage of Senate Bill (SB) 1016 (the Per Capita Disposal

Measurement System) in 2006, only per capita disposal rates are measured to determine if a jurisdiction's efforts are meeting the intent of AB 939.

California Solid Waste Reuse and Recycling Access Act

The California Solid Waste Reuse and the Recycling Access Act of 1991 (AB 1327) is codified in Public Resources Code Sections 42900-42911. As amended, AB 1327 requires each local jurisdiction to adopt an ordinance requiring commercial, industrial, or institutional building, marina, or residential buildings having five or more living units to provide an adequate storage area for the collection and removal of recyclable materials. The size of these storage areas is to be determined by the appropriate jurisdictions' ordinance. If no such ordinance exists in the jurisdiction, the Cal Recycle model ordinance shall take effect.

Impact Analysis

The following includes an analysis of environmental parameters related to *Utilities and Service Systems* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur.

Would the Project:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water or wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			X	
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?			X	
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				X
d) Generate solid waste in excess of State or local standards, or infrastructure, or otherwise impair the attainment of solid waste reduction goals?			X	
e) Comply with federal, State, and local management and reduction statutes and regulations related to solid waste?				X

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

The County proposes to abatement, demolition, remove, and dispose of the former 21,275 square foot, 56-bed Old Juvenile Hall Justice Center facility. Upon the completion of demolition and cleanup activities, a new security chain link fence will be installed around the perimeter of the property. The existing garden will continue to be maintained and utilized by the Department of Probation. The project does not involve the development of additional permanent facilities onsite. Thus, the proposed project would not result in an increase in wastewater treatment, stormwater drainage, electric power, natural gas or telecommunications facilities demand. Further, no increase in stormwater runoff volume or rates would occur post-demolition as demolition activities would decrease the amount of impervious surface.

Although some of the existing paved parking area will remain in place, approximately 29,355 square feet of imperious surfaces would be removed, increasing the amount of pervious areas onsite. Stormwater runoff would continue to be directed to an onsite drainage swale adjacent to Radio Lane. As a result, the proposed project would not result in a significant increase in impervious surfaces that would require the construction or expansion of stormwater drainage facilities. Impacts are less than significant in this regard.

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

Demolition would occur over an approximate 15 to 20-day period and include the related structures and systems (i.e., utility box, electrical main service, gas lines, meter boxes) within the identified demolition area. Although water would be used to suppress dust in compliance with Shasta County Air Quality Management District (SCAQMD) Rule 3.16, the project would not require large amounts of water for dust suppression purposes. Demolition activities would require approximately 4,000 gallons per day of water during an approximated 8-day building demolition period, followed by a reduced usage of approximately 2,000 gallons per day of water over a to 7 to 12 day period of concrete breaking and continued material off hauling. Based on the above estimates, temporary water demand associated with demolition would require approximately 56,000 gallons or 0.17 acre feet of water. To reduce water usage a DustBoss system, consisting of atomized misting technology, may be also be utilized. According to the City of Redding 2020 Urban Water Master Plan, the City maintains sufficient water supplies during normal, dry, and multiple dry years (COR, 2021).

Once demolition activities are complete the site would not require any water supplies other than water used for continuing the existing gardening onsite. As noted above, existing water supplies are sufficient and water needs for the project would be minimal and temporary. Impacts are considered less than significant in this regard.

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?*

Demolition activities would result in the existing sewer line to capped and removed from the site. Because the proposed project will not connect to any water or wastewater treatment facilities, there would be no impact on the capacity of an existing water or wastewater treatment facility. No impact would occur in this regard.

d) *Generate solid waste in excess of State or local standards, or infrastructure, or otherwise impair the attainment of solid waste reduction goals?*

The County estimates that the project would generate approximately 15,400 cubic yards of demolition waste over the approximately 15 to 20-day project timeline. Demolition debris would be recycled or transported to West Central Sanitary Landfill and disposed of appropriately. The landfill currently has additional capacity, is permitted for 700 tons per day, and has current disposal volume average 500 tons per day. Demolition of the building and associated structures would generate various types of waste: steel, concrete, hazardous waste, and general waste. Table 4-8, NON-RESIDENTIAL CONSTRUCTION AND DEMOLITION ESTIMATES, provides an estimate of waste generated during demolition.

Table 4-8
NON-RESIDENTIAL CONSTRUCTION AND DEMOLITION ESTIMATES

Demolition Type	Amount (square feet)	Unit (lbs/sf)	Total (Pounds / Tonnage)
Building Demolition	22,275	158	3,519,450 / 1,759
Concrete Foundations / Sidewalks	7,080	173	1,224,840 / 612
		TOTAL	**4,744,290 / 2,317**
Source: U.S. EPA. Construction and Demolition Amounts. 2003.			

Using the EPA waste generation rates as noted in Table 4-8, the proposed project is estimated to generate approximately 2,317 tons of demolition waste. Application of the California Building Code requirements regarding recycling of construction waste will divert a minimum of 50 percent of the construction waste from the landfill. This results in a total estimated construction solid waste generation of 1,158.5 tons, or 57.9 tons per day during construction.

In accordance with AB 939, the County's demolition contractor would ensure that source reduction techniques and recycling measures are incorporated into project demolition documents. This would reduce the potential amount of waste disposed of at the West Central Landfill and would contribute to the recycling goals set forth by the County, California Building Code, and AB 939.

Hazardous waste would be transported by a licensed hazardous waste transporter to a permitted hazardous waste disposal facility. There are currently two Class I (hazardous waste) landfills located in California, and hazardous waste can also be transported to permitted facilities outside California. Steel that can be reused would be sold on the open market.

Hazardous waste removal at each unit would primarily involve asbestos and lead abatement. The project would involve removal of approximately 71 cubic yards of hazardous waste material based on the estimated quantities contained in the Hazardous Materials Abatement Work Plan (ACC, 2022). There are currently two Class I (hazardous waste) landfills located in California, as listed in Table 4-9. The current remaining capacity for the California Class I landfills is 17,468,595 cubic yards (CalRecycle 2023a, 2023b). Based on the estimate of hazardous waste to be generated during the 3 week project, 71 cubic yards represents a mathematically insignificant amount of hazardous materials. Impacts to the remaining capacity available in California Class I landfills is considered less than significant.

Table 4-9
EXISTING CLASS I LANDFILLS

Landfill	Location	Estimated Closing Year	Maximum Permitted Daily Load (tons per day)	Current Remaining Capacity (Cubic Yards)
Clean Harbors	Buttonwillow	2040	10,500	NA
Chemical Waste Management, Inc.	Kettleman City	2030	2,000	17,468,595
		Total	**12,500**	**17,468,595**
Source: CalRecycle. Solid Waste Information System. 2023.				

The amount of waste generated during project demolition is not expected to exceed State or local standards, significantly impact landfill capacities, or otherwise impair the attainment of solid waste reduction goals. Impacts are considered less than significant in this regard.

e) *Comply with federal, State, and local management and reduction statutes and regulations related to solid waste?*

The 1989 California Integrated Waste Management Act (AB 939) requires the County to attain specific waste diversion goals. In addition, the California Solid Waste Reuse and Recycling Access Act of 1991, as amended, requires recycling of demolition debris to reduce operating expenses and save valuable landfill space.

As discussed above, demolition activities would general various types of solid waste. Common demolition waste may include metals, wood, roofing materials, masonry, plastic pipe, rocks, and dirt. In relation to the local management and reductions techniques, handling, and disposal of this waste, the County would comply withal State solid waste diversion, reduction, and recycling mandates. No impact would occur in this regard.

Mitigation Measures

No mitigation measures are required.

Findings

Based upon the review of the information above, implementation of the proposed project will have a less than significant impact with respect to *Utilities and Service Systems*.

Documentation and References

COR (City of Redding). 2000. *City of Redding General Plan 2000 – 2020, Public Facilities Element*. October 3, 2000.

COR. 2023. *City of Redding Geographic Information System*. [Online]: https://gispub.cityofredding.org/reddingmap/. Accessed July 25, 2023.

COR. 2021. *City of Redding 2020 Urban Water Management Plan*. November 2021.

CalRecycle (California Department of Resources Recycling and Recovery). 2023a. *Facility/Site Summary Details: Clean Harbors Buttonwillow LLC (15-AA-0257)*. [Online]: https://www2.calrecycle.ca.gov/swfacilities/Directory/15-AA-0257. Accessed July 26, 2023.

CalRecycle. 2023b. *Facility/Site Summary Details: Chemical Waste Management Inc. Unit B-17*. [Online]: https://www2.calrecycle.ca.gov/swfacilities/Directory/16-AA-0027. Accessed July 26, 2023.

EPA (United States Environmental Protection Agency). *Estimating 2003 Building-Related Construction and Demolition Materials Amounts*. 2003.

XX. Wildfire

This section of the Initial Study provides an analysis of potential wildfire impacts. The analysis considers potential impacts of the project on emergency access and evacuation routes to, through and from the project area and the exacerbation of fire risk or that may result in temporary or ongoing impacts to the environment during or following a fire.

Environmental Setting

Human activities such as equipment operation cause the vast majority of wildland fires that occur on average throughout the State. According to the Shasta County and City of Anderson Multi-Jurisdictional Hazard Mitigation Plan, wildland fire is an ongoing concern for County (Shasta, 2017). Generally, the fire season extends from early spring through late fall of each year during the hotter, dryer months. Drought may extend the fire season in Shasta County, including its cities.

Fire conditions arise from a combination of high temperatures, low moisture content in the air and fuel, accumulation of vegetation, and high winds. The outbreak and spread of wildland fires within the project area is a potential danger, particularly during the hot, dry summer and fall months. Various factors contribute to the intensity and spread of wildland fires: humidity, wind speed and direction, vegetation type, the amount of vegetation (fuel), and topography. The topography, climate, and vegetation of much of the area are conducive to the spread of wildland fires once started.

Fire Hazard Severity Zone

CAL FIRE has mapped areas of significant fire hazards in the state through its Fire and Resources Assessment Program (FRAP). These maps place areas of the state into different fire hazard severity zones (FHSZ) based on a hazard scoring system using subjective criteria for fuels, fire history, terrain influences, housing density, and occurrence of severe fire weather where urban conflagration could result in catastrophic losses. This classification system designates lands in three general classifications, “Moderate”, “High” and “Very High” Fire Hazard Severity Zones. The FRAP does not identify the project site or surrounding vicinity as a part of a designated fire hazard severity zone (CAL FIRE, 2008).

As part of this mapping system, land where CAL FIRE is responsible for wildland fire protection and generally located in unincorporated areas is classified as a State Responsibility Area (SRA). Where local fire protection agencies, such as the Shasta County Fire Department (SCFD) or City of Redding Fire Department (RFD), are responsible for wildfire protection, the land is classified as a Local Responsibility Area (LRA). The project site does not fall within a State Responsibility Area (SRA).

Fire Protection

The proposed project is within Redding Fire Department (RFD) Fire Station 3 response area (COR, 2023). Fire Station No. 3 is located approximately one mile northwest of the project site at 4255 Westside Road.

Regulatory Setting

This section summarizes current federal, State, and local regulations relevant to the review of *Wildfire* for this project. Ordinances, regulations, or standards that are applicable to the environmental review of potential impacts related to wildfire hazards include the following:

California Department of Forestry and Fire Protection

CAL FIRE protects the people of California from fires, responds to emergencies, and protects and enhances forest, range, and watershed values providing social, economic, and environmental benefits to rural and urban citizens. The Office of the State Fire Marshal supports CAL FIRE’s mission by focusing on fire prevention. It provides support through a wide variety of fire safety responsibilities including by regulating buildings in which people live, congregate, or are confined; by controlling substances and products which may, in and of themselves, or by their misuse, cause injuries, death, and

destruction by fire; by providing statewide direction for fire prevention in wildland areas; by regulating hazardous liquid pipelines; by reviewing regulations and building standards; and by providing training and education in fire protection methods and responsibilities.

California Fire Code

The California Fire Code (CFC) is contained within Title 24, Chapter 9 of the California Code of Regulations. Based on the International Fire Code, the CFC was created by the California Buildings Standards Commission and regulates the use, handling, and storage requirements for hazardous materials at fixed facilities. Similar to the International Fire Code, the CFC and CBC use a hazards classification system to determine the appropriate measures to incorporate to protect life and property.

California Public Resources Code

California Public Resources Code Section 4290 requires minimum fire safety standards related to defensible space that are applicable to SRA lands and lands classified and designated as VHFHSZs. California Public Resources Code Section 4291 requires a reduction of fire hazards around buildings, which requires 100 feet of vegetation management around all buildings and is the primary mechanism for conducting fire prevention activities on private property within CAL FIRE jurisdiction.

Impact Analysis

The following includes an analysis of environmental parameters related to *Wildfire* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur.

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?			X	
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose projects occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of wildfire?			X	
c) Require installation or maintenance of associated infrastructure (such as roads, fuel sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?			X	
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result, post-fire slope instability, or drainage changes?			X	

a) *Substantially impair an adopted emergency response plan or emergency evacuation plan?*

Refer to impact discussion under IX.f, above. With the exception of South Bonnyview and SR-273, no other roads immediately serving the proposed project are identified as an evacuation route in the City's General Plan. No roadway closures are anticipated during demolition activities. As a result, the proposed project would not impair implementation of any emergency response plan or emergency evaluation plan as it would not alter existing roadways, or physically interfere with existing roadway patterns. Impacts would be less than significant.

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

Due to the nature of the project and the flat surrounding surface of the immediate project area, there would be no significant risk of pollutant concentration exposure from a wildfire or the uncontrollable spread of a wildfire caused by a geographic slope or prevailing winds. The area surrounding the project site is urbanized and not located within a fire hazard zone. Therefore, the likelihood of exposing adjacent areas to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire is considered minimal. Furthermore, the project would not result in additional occupants on the project site with the exception of construction workers during temporary demolition activities. Thus, impacts associated with wildfires would be less than significant.

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

Demolition activities will be conducted in accordance with applicable standards to reduce the potential for the activities to impact adjacent residences from wildfire events. Additionally, demolition activities would not 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. Impacts are less than significant in this regard.

d) *Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result, post-fire slope instability, or drainage changes?*

Demolition activities would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. The majority of the site is located outside of the mapped 100-year floodplain; however, the northeast corner of the site that contains the 1,000 portable school room and shed are located within Zone X (areas of 0.2% annual change flood; areas of 1% chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood (FEMA, 2011). There are no sheer or unstable cliffs in the immediate area. Considering these project site features and characteristics, potential future post-fire conditions are not expected to increase risks associated with runoff and erosion. Considering implementation of erosion control BMPs, potential impacts associated with runoff, post-fire slope instability, or drainage changes are considered to be less than significant.

Mitigation Measures

No mitigation measures are required.

Findings

Based upon the review of the information above, implementation of the proposed project will have a less than significant impact with respect to *Wildfire*.

Documentation and References

CAL FIRE (California Department of Forestry and Fire Protection). 2023. *Fire Hazard Severity Zones.* [Online]: https://egis.fire.ca.gov/FHSZ/. Accessed July 25, 2023.

CAL FIRE. 2018. *2018 Strategic Fire Plan for California*. 2018.

COR (City of Redding). 2023. *City of Redding Geographic Information System*. [Online]: https://gispub.cityofredding.org/reddingmap/. Accessed July 25, 2023.

FEMA (Federal Emergency Management Agency). 2011. *Flood Insurance Rate Map Panel #06089C1545G*. March 17, 2011.

Shasta (Shasta County). 2023. *Shasta County Geographic Information System*. [Online]: https://maps.shastacounty.gov/ShastaCountyMap/ Accessed July 25, 2023.

XXI. Mandatory Findings of Significance

Based on the analysis undertaken as part of this Initial Study, the following findings can be made:

Would the Project:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below the self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number, or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?			X	
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?			X	
c) Does the project have potential environmental effects which may cause substantial adverse effects on human beings, either directly or indirectly?				X

Impact Analysis

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 the 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?*

Evaluation of the proposed project as provided in Section IV, BIOLOGICAL RESOURCES, has shown that the activities of the proposed project do not have the potential to degrade the quality of the environment and will not substantially reduce the habitat or cause wildlife populations to drop below self-sustaining levels. Mitigation measures for biological resources have been developed to reduce potential impacts on sensitive habitats and species to less than significant levels. Refer to Mitigation Measures BIO-1, BIO-2, and BIO-3 in Section IV, BIOLOGICAL RESOURCES.

Also, based on the discussion and findings in Section V, CULTURAL RESOURCES, there is evidence to support a finding that the proposed project is not eligible for listing in the National Register of Historic Places (NRHP) or the California Register of Historic Resources (CRHR) under any significance criteria. The project is located in an area that does not appear to be sensitive for prehistoric or historic occupation and is considered to have a low sensitivity for surface sites. Although no archaeological deposits or features are known to occur onsite, implementation of mitigation measures will ensure that any additional archaeological deposits or features that may be discovered are fully protected during implementation of the project. Refer to Mitigation Measures CR-1 and CR-2 in Section V, CULTURAL RESOURCES.

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)?*

As discussed throughout this document, implementation of the proposed project has the potential to result in impacts to the environment that are individually limited, but are not cumulatively considerable, including impacts to biological and cultural resources. In addition, as discussed in Section III, AIR QUALITY, the project will contribute to a temporary cumulative air quality impacts. However, with the application of Mitigation Measure AQ-1 and Mitigation Measure AQ-2, impacts would be less than significant.

In all instances where the project has the potential to contribute to cumulatively considerable impacts to the environment (including the resources listed above) mitigation measures have been imposed to reduce the potential effects to less than significant levels. As such, with incorporation of the mitigation measures imposed throughout this Initial Study, including compliance with local, State, and federal rules and regulations, the proposed project would not contribute to environmental effects that are individually limited, but cumulatively considerable, and impacts would be less than significant.

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

The potential for the proposed project to result in environmental effects that could adversely affect human beings, either directly or indirectly, has been discussed throughout this document. In instances where the proposed project has the potential to result in direct or indirect adverse effects to human beings, including impacts to air quality and cultural resources, mitigation measures have been applied to reduce the impact to below a level of significance. In other instances, the project design and compliance with existing laws and regulations would reduce impacts of the project to less than significant levels. Therefore, the proposed project as designed, mitigated, and in compliance with existing regulatory requirements, would not have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly. Therefore, impacts would be less than significant with mitigation incorporated.

Mitigation Measures

Mitigation Measure AQ-1

The demolition contractor shall be responsible for implementing the Hazardous Materials Abatement Work Plan prepared for the project (ACC, 2022; see Attachment F) to reduce the potential for the airborne release of asbestos containing materials during the proposed demolition activities.

Mitigation Measure AQ-2

The demolition contractor shall be responsible for implementing the applicable Reasonably Available Control Measures (RACMs) in Shasta County AQMD Rule 3-16 to reduce potential fugitive dust generation during the proposed demolition activities. For demolition activity, the minimum required RACMs include the use of wind breaks/screens and the application of dust suppressants.

Mitigation Measure BIO-1

Prior to the initiation of demolition activities, the County shall install tree protection signs on all trees to be preserved.

Mitigation Measure BIO-2

In order to avoid impacts to nesting birds, including raptors, protected under the federal Migratory Bird Treaty Act and California Fish and Game Code Section 3503 and Section 3503.5, including their nests and eggs, one of the following shall be implemented:

- Vegetation removal and other ground-disturbance activities associated with demolition shall occur between September 1st and January 31st when birds are not nesting; or

- If vegetation removal or ground disturbance activities occur during the nesting season, a pre-construction nesting survey shall be conducted by a qualified biologist to identify active nests in and adjacent to the work area. Surveys shall begin prior to sunrise and continue until vegetation and nests have been sufficiently observed. The survey shall take into account acoustic impacts and line-of-sight disturbances occurring as a result of the project in order to determine a sufficient survey radius to avoid nesting birds.

  At a minimum, the survey report shall include a description of the area surveyed, date and time of the survey, ambient conditions, bird species observed in the area, a description of any active nests observed, any evidence of breeding behaviors (e.g., courtship, carrying nest materials or food, etc.), and a description of any outstanding conditions that may have impacted the survey results (e.g., weather conditions, excess noise, the presence of predators, etc.). The results of the survey shall be submitted to the CDFW upon completion. The survey shall be conducted no more than one week prior to the initiation of construction. If construction activities are delayed or suspended for more than one week after the preconstruction survey, the site shall be resurveyed.

  If active nests are found, the County shall contact the CDFW and the USFWS regarding appropriate action to comply with the Migratory Bird Treaty Act and California Fish and Game Code Section 3503. Compliance measures may include, but are not limited to, exclusion buffers, sound-attenuation measures, seasonal work closures based on the known biology and life history of the species identified in the survey, as well as ongoing monitoring by biologists.

Mitigation Measure BIO-3

The following minimization measures for bats shall be implemented:

- Environmental training including information regarding local bat species and their general roost ecology for demolition crews prior to demolition.
- If feasible, demolition activities shall be conducted outside the maternity season (April 15th – August 31st).
- The Shasta County Department of Public Works shall inspect and plug soffit access points along the south side of the building, western field, and eastern chicken coop and receiving bay. If needed, a qualified biologist shall assist in identifying and plugging entry and exit locations and all other points identified during the surveys. The County shall use expanding foam or hardware cloth to plug and remove the potential bat entry and exit locations outside the maternity (April 16th – September 1st) and winter hibernation seasons (October 16th – February 28th).

Should demolition activities occur outside of the maternity season (April 15th – August 31st), the following measures shall be implemented by the County:

- Within two days (48 hours) of the start of work a preconstruction bat roost surveys shall be conducted by a qualified biologist. Surveys shall include internal and external surveys for roosting bats and inspection of all bat exclusion measures to ensure they are in working order. This survey can be combined with general preconstruction surveys (e.g., nesting bird survey). If bat exclusion measures are determined to be in poor working order, then night emergence surveys shall be conducted to determine if bats are currently occupying onsite structures.
- If bats are observed, at any time, within onsite structures, bats shall be allowed to leave on their own. Under the supervision of a qualified bat biologist, one-way bat doors can be used to ensure bats cannot reenter the identified roost. Once bats are confirmed to have left, the roost habitat shall be completely sealed so bat cannot reenter. In addition, the roost habitat shall be modified to reduce the suitability for roosting bats (e.g., placing fans in the barn increase the airflow and lower the structure daytime and nighttime temperatures). Bat eviction methods (e.g., one-way doors) and roost modifications shall only occur outside the bat maternity season (April 15th – August 31st).
- If individual nonbreeding and non-special status bats are present, a qualified biologist may be retained to develop a roost protection plan, remove the bats, and work may proceed year-round onsite. If a maternity roost or special status species bat is observed, no work is allowed without first, notifying and consultation with CDFW, development of a bat protection plan, excluding bats outside of the breeding season, and providing alternate roost site(s).

Mitigation Measure CR-1

If cultural resources, such as chipped or ground stone, or bone are inadvertently discovered during ground-disturbance activities, work shall be stopped within 50 feet of the discovery, as required by the California Environmental Quality Act (CEQA; January 1999 Revised Guidelines, Title 14 California Code of Regulations [CCR] Section 15064.5 [f]). Work near the archaeological finds shall not resume until a professional archaeologist, who meets the Secretary of the Interior's Standards and Guidelines, has evaluated the material, and offered recommendations for further action.

Mitigation Measure CR-2

If in the event that previously unidentified evidence of human burial or human remains are discovered during project construction, work will stop at the discovery location, within 20 meters (66 feet), and any nearby area reasonably suspected to overlie human remains (Public Resources Code, Section 7050.5) the Shasta County Coroner must be informed and consulted, per State law. If the coroner determines the remains to be Native American, he or she shall contact the Native American Heritage Commission within 24 hours. The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descendent. The most likely descendent will be given an opportunity to make recommendations for means of treatment of the human remains and any associated grave goods. when the commission is unable to identify a descendant or the descendants identified fail to make a recommendation, or the landowner or his or her authorized representative rejects the recommendation of the descendants and the mediation provided for in subdivision (k) of Section 5097.94, if invoked, fails to provide measures acceptable to the landowner, the landowner or his or her authorized representative shall reinter the human remains and items associated with Native American human remains with appropriate dignity on the property in a location not subject to further and future subsurface disturbance. Work in the area shall not continue until the human remains are dealt with according to the recommendations of the County Coroner, Native American Heritage Commission and/or the most likely descendent have been implemented.

Mitigation Measure N-1

The demolition contractor shall be responsible for complying with the following measures during demolition activities to reduce potential noise impacts:

- Demolition activities shall be restricted to the hours between 7:00 a.m. and 6:00 p.m. Monday through Friday. Demolition activities shall also be prohibited on weekends and holidays.

Mitigation Measure TRF-1

If required by the City of Redding, prior to initiation of demolition activities onsite, the demolition contractor shall develop a traffic control plan and submit the plan to the City of Redding Public Works Department. The plan shall identify temporary lane, sidewalk, or transit stop closures and provide information regarding how access and connectivity will be during demolition activities. The plan shall include details regarding traffic controls that would be employed, including signage, detours, and flaggers. The traffic control plan shall be implemented by the contractor during to allow for the safe passage of vehicles, pedestrians, and cyclists along Radio Lane.

Mitigation Measure TCR-1

Unanticipated Discovery - If any suspected TCRs are discovered during ground-disturbing construction activities, all work shall cease within at least 50 feet of the find. The County shall invite a Tribal Representative from a California Native American tribe that is traditionally and culturally affiliated with the geographic area to make recommendations about whether or not the discovery represents a TCR (PRC Section 21074) and, if so, to make recommendations for culturally appropriate treatment. The contractor shall implement any measures determined by the County to be necessary. Work at the discovery location cannot resume until the treatment has been implemented to the satisfaction of the County.

Findings

Based upon the review of the information above, implementation of the proposed project is not anticipated to have a substantial adverse effect on the environment. Therefore, there is no significant impact.

Documentation and References

Refer to section I through section XX of this Initial Study.

Section 5 – Mitigation Monitoring Program (MMP)

Mitigation Measure / Condition	Timing / Implementation	Enforcement / Monitoring	Verification (Date & Initials)
Section III. Air Quality *Mitigation Measure AQ-1* The demolition contractor shall be responsible for implementing the Hazardous Materials Abatement Work Plan prepared for the project (ACC, 2022; see Attachment F) to reduce the potential for the airborne release of asbestos containing materials during the proposed demolition activities. *Mitigation Measure AQ-2* The demolition contractor shall be responsible for implementing the applicable Reasonably Available Control Measures (RACMs) in Shasta County AQMD Rule 3-16 to reduce potential fugitive dust generation during the proposed demolition activities. For demolition activity, the minimum required RACMs include the use of wind breaks/screens and the application of dust suppressants.	Throughout Demolition Activities Throughout Demolition Activities	Department of Public Works Department of Public Works	
Section IV. Biological Resources *Mitigation Measure BIO-1* Prior to the initiation of demolition activities, the County shall install tree protection signs on all trees to be preserved. *Mitigation Measure BIO-2* In order to avoid impacts to nesting birds, including raptors, protected under the federal Migratory Bird Treaty Act and California Fish and Game Code Section 3503 and Section 3503.5, including their nests and eggs, one of the following shall be implemented: • Vegetation removal and other ground-disturbance activities associated with demolition shall occur between September 1st and January 31st when birds are not nesting; or • If vegetation removal or ground disturbance activities occur during the nesting season, a pre-construction nesting survey shall be conducted by a qualified biologist to identify active nests in and adjacent to the work area. Surveys shall begin prior to sunrise and continue until vegetation and nests have been sufficiently observed. The survey shall take into account acoustic impacts and line-of-sight disturbances occurring as a result of the project in order to determine a sufficient survey radius to avoid nesting birds. At a minimum, the survey report shall include a description of the area surveyed, date and time of the survey, ambient conditions, bird species observed in the area, a description of any active nests observed, any evidence of breeding behaviors (e.g., courtship, carrying nest materials or food, etc.), and a description of any outstanding conditions that may have impacted the survey results (e.g., weather conditions, excess noise, the presence of predators, etc.). The results of the survey shall be submitted to the CDFW upon completion. The survey shall be conducted no more than one week prior to the initiation of construction. If construction activities are delayed or suspended for more than one week after the preconstruction survey, the site shall be resurveyed.	Prior to the Commencement of Demolition Activities Prior to the Commencement of Demolition Activities	Department of Public Works Department of Public Works	

Mitigation Measure / Condition	Timing / Implementation	Enforcement / Monitoring	Verification (Date & Initials)
If active nests are found, the County shall contact the CDFW and the USFWS regarding appropriate action to comply with the Migratory Bird Treaty Act and California Fish and Game Code Section 3503. Compliance measures may include, but are not limited to, exclusion buffers, sound-attenuation measures, seasonal work closures based on the known biology and life history of the species identified in the survey, as well as ongoing monitoring by biologists. *Mitigation Measure BIO-3* The following minimization measures for bats shall be implemented: • Environmental training including information regarding local bat species and their general roost ecology for demolition crews prior to demolition. • If feasible, demolition activities shall be conducted outside the maternity season (April 15th – August 31st). • The Shasta County Department of Public Works shall inspect and plug soffit access points along the south side of the building, western field, and eastern chicken coop and receiving bay. If needed, a qualified biologist shall assist in identifying and plugging entry and exit locations and all other points identified during the surveys. The County shall use expanding foam or hardware cloth to plug and remove the potential bat entry and exit locations outside the maternity (April 16th – September 1st) and winter hibernation seasons (October 16th – February 28th). Should demolition activities occur outside of the maternity season (April 15th – August 31st), the following measures shall be implemented by the County: • Within two days (48 hours) of the start of work a preconstruction bat roost surveys shall be conducted by a qualified biologist. Surveys shall include internal and external surveys for roosting bats and inspection of all bat exclusion measures to ensure they are in working order. This survey can be combined with general preconstruction surveys (e.g., nesting bird survey). If bat exclusion measures are determined to be in poor working order, then night emergence surveys shall be conducted to determine if bats are currently occupying onsite structures. • If bats are observed, at any time, within onsite structures, bats shall be allowed to leave on their own. Under the supervision of a qualified bat biologist, one-way bat doors can be used to ensure bats cannot reenter the identified roost. Once bats are confirmed to have left, the roost habitat shall be completely sealed so bat cannot reenter. In addition, the roost habitat shall be modified to reduce the suitability for roosting bats (e.g., placing fans in the barn increase the airflow and lower the structure daytime and nighttime temperatures). Bat eviction methods (e.g., one-way doors) and roost modifications shall only occur outside the bat maternity season (April 15th – August 31st). • If individual nonbreeding and non-special status bats are present, a qualified biologist may be retained to develop a roost protection plan, remove the bats, and work may proceed year-round onsite. If a maternity roost or special status species bat is observed, no work is allowed without first, notifying and consultation with CDFW, development of a bat protection plan, excluding bats outside of the breeding season, and providing alternate roost site(s).	Prior to the Commencement of Demolition Activities	Department of Public Works	

Mitigation Measure / Condition	Timing / Implementation	Enforcement / Monitoring	Verification (Date & Initials)
Section V. Cultural Resources *Mitigation Measure CR-1* If cultural resources, such as chipped or ground stone, or bone are inadvertently discovered during ground-disturbance activities, work shall be stopped within 50 feet of the discovery, as required by the California Environmental Quality Act (CEQA; January 1999 Revised Guidelines, Title 14 California Code of Regulations [CCR] Section 15064.5 [f]). Work near the archaeological finds shall not resume until a professional archaeologist, who meets the Secretary of the Interior's Standards and Guidelines, has evaluated the material, and offered recommendations for further action. *Mitigation Measure CR-2* If in the event that previously unidentified evidence of human burial or human remains are discovered during project construction, work will stop at the discovery location, within 20 meters (66 feet), and any nearby area reasonably suspected to overlie human remains (Public Resources Code, Section 7050.5) the Shasta County Coroner must be informed and consulted, per State law. If the coroner determines the remains to be Native American, he or she shall contact the Native American Heritage Commission within 24 hours. The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descendent. The most likely descendent will be given an opportunity to make recommendations for means of treatment of the human remains and any associated grave goods. when the commission is unable to identify a descendant or the descendants identified fail to make a recommendation, or the landowner or his or her authorized representative rejects the recommendation of the descendants and the mediation provided for in subdivision (k) of Section 5097.94, if invoked, fails to provide measures acceptable to the landowner, the landowner or his or her authorized representative shall reinter the human remains and items associated with Native American human remains with appropriate dignity on the property in a location not subject to further and future subsurface disturbance. Work in the area shall not continue until the human remains are dealt with according to the recommendations of the County Coroner, Native American Heritage Commission and/or the most likely descendent have been implemented.	Throughout Demolition Activities Throughout Demolition Activities	Department of Public Works Department of Public Works	
Section XIII. Noise *Mitigation Measure N-1* The demolition contractor shall be responsible for complying with the following measures during demolition activities to reduce potential noise impacts: • Demolition activities shall be restricted to the hours between 7:00 a.m. and 6:00 p.m. Monday through Friday. Demolition activities shall also be prohibited on weekends and holidays.	Throughout Demolition Activities	Department of Public Works	
Section XVII. Transportation *Mitigation Measure TRF-1* If required by the City of Redding, prior to initiation of demolition activities onsite, the demolition contractor shall develop a traffic control plan and submit the plan to the City of Redding Public Works Department. The plan shall identify temporary lane, sidewalk, or transit stop closures and provide information regarding how access and connectivity will be during demolition activities. The plan shall	Prior to the Commencement of Demolition and	Department of Public Works	

Mitigation Measure / Condition	Timing / Implementation	Enforcement / Monitoring	Verification (Date & Initials)
include details regarding traffic controls that would be employed, including signage, detours, and flaggers. The traffic control plan shall be implemented by the contractor during to allow for the safe passage of vehicles, pedestrians, and cyclists along Radio Lane.	Throughout Demolition Activities		
Section XVIII. Tribal Cultural Resources *Mitigation Measure TCR-1* Unanticipated Discovery - If any suspected TCRs are discovered during ground-disturbing construction activities, all work shall cease within at least 50 feet of the find. The County shall invite a Tribal Representative from a California Native American tribe that is traditionally and culturally affiliated with the geographic area to make recommendations about whether or not the discovery represents a TCR (PRC Section 21074) and, if so, to make recommendations for culturally appropriate treatment. The contractor shall implement any measures determined by the County to be necessary. Work at the discovery location cannot resume until the treatment has been implemented to the satisfaction of the County.	Throughout Demolition Activities	Department of Public Works	

Section 6 – Attachments

Attachment A – Air Quality & GHG Modeling Outputs

Attachment B – Biological Resources Report

Attachment C – Structural Surveys for Special-Status Bat Species

Attachment D – Cultural Resources Inventory Report

Attachment E – Historical Resource Evaluation Report

Attachment F – Hazardous Materials Abatement Work Plan

Attachment A

Air Quality & GHG Modeling Outputs

Old Juvenile Hall Justice Center Demolition Summary Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Old Juvenile Hall Justice Center Demolition
Construction Start Date	5/1/2024
Lead Agency	Shasta County
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.70
Precipitation (days)	1.20
Location	40.54861000598376, -122.3797578788441
County	Shasta
City	Redding
Air District	Shasta County AQMD
Air Basin	Sacramento Valley
TAZ	136
EDFZ	15
Electric Utility	Redding Electric Utility
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.16

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Government Office Building	29.4	1000sqft	3.00	29,400	20,000	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.07	1.74	18.0	17.5	0.04	0.70	8.52	9.22	0.65	3.73	4.37	—	4,286	4,286	0.12	0.29	4.08	4,381
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.12	0.10	1.04	1.00	< 0.005	0.04	0.49	0.53	0.04	0.21	0.25	—	246	246	0.01	0.02	0.10	251
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.02	0.02	0.19	0.18	< 0.005	0.01	0.09	0.10	0.01	0.04	0.05	—	40.7	40.7	< 0.005	< 0.005	0.02	41.6

6. Climate Risk Detailed Report

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	4	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A

Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	4	1	1	4
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

7. Health and Equity Details

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	32.0

Healthy Places Index Score for Project Location (b)	32.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

Old Juvenile Hall Justice Center Demolition Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Old Juvenile Hall Justice Center Demolition
Construction Start Date	5/1/2024
Lead Agency	Shasta County
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.70
Precipitation (days)	1.20
Location	40.54861000598376, -122.3797578788441
County	Shasta
City	Redding
Air District	Shasta County AQMD
Air Basin	Sacramento Valley
TAZ	136
EDFZ	15
Electric Utility	Redding Electric Utility
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.16

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Government Office Building	29.4	1000sqft	3.00	29,400	20,000	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.07	1.74	18.0	17.5	0.04	0.70	8.52	9.22	0.65	3.73	4.37	—	4,286	4,286	0.12	0.29	4.08	4,381
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.12	0.10	1.04	1.00	< 0.005	0.04	0.49	0.53	0.04	0.21	0.25	—	246	246	0.01	0.02	0.10	251
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.02	0.02	0.19	0.18	< 0.005	0.01	0.09	0.10	0.01	0.04	0.05	—	40.7	40.7	< 0.005	< 0.005	0.02	41.6

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	2.07	1.74	18.0	17.5	0.04	0.70	8.52	9.22	0.65	3.73	4.37	—	4,286	4,286	0.12	0.29	4.08	4,381
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.12	0.10	1.04	1.00	< 0.005	0.04	0.49	0.53	0.04	0.21	0.25	—	246	246	0.01	0.02	0.10	251
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.02	0.02	0.19	0.18	< 0.005	0.01	0.09	0.10	0.01	0.04	0.05	—	40.7	40.7	< 0.005	< 0.005	0.02	41.6

3. Construction Emissions Details

3.1. Demolition (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.92	1.61	15.6	16.0	0.02	0.67	—	0.67	0.62	—	0.62	—	2,494	2,494	0.10	0.02	—	2,502
Dust From Material Movement	—	—	—	—	—	—	6.60	6.60	—	3.37	3.37	—	—	—	—	—	—	—
Demolition	—	—	—	—	—	—	1.40	1.40	—	0.21	0.21	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.90	0.92	< 0.005	0.04	—	0.04	0.04	—	0.04	—	143	143	0.01	< 0.005	—	144

Dust From Material Movement	—	—	—	—	—	—	0.38	0.38	—	0.19	0.19	—	—	—	—	—	—	—
Demolition	—	—	—	—	—	—	0.08	0.08	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.16	0.17	< 0.005	0.01	—	0.01	0.01	—	0.01	—	23.8	23.8	< 0.005	< 0.005	—	23.8
Dust From Material Movement	—	—	—	—	—	—	0.07	0.07	—	0.04	0.04	—	—	—	—	—	—	—
Demolition	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.04	0.78	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	114	114	0.01	< 0.005	0.46	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.08	0.06	2.38	0.67	0.01	0.03	0.43	0.46	0.03	0.12	0.15	—	1,679	1,679	0.02	0.27	3.63	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.92	5.92	< 0.005	< 0.005	0.01	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—

Hauling	< 0.005	< 0.005	0.14	0.04	< 0.005	< 0.005	0.02	0.03	< 0.005	0.01	0.01	—	96.6	96.6	< 0.005	0.02	0.09	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.98	0.98	< 0.005	< 0.005	< 0.005	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	16.0	16.0	< 0.005	< 0.005	0.01	—

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	5/1/2024	5/24/2024	6.00	21.0	Demolition of Building

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

Demolition	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Demolition	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	12.5	11.1	LDA,LDT1,LDT2
Demolition	Vendor	—	6.95	HHDT,MHDT
Demolition	Hauling	46.0	10.0	HHDT
Demolition	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition	0.00	15,400	3.00	29,355	—

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Government Office Building	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	375	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	21.6	annual days of extreme heat
Extreme Precipitation	15.1	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	1.15	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A

Extreme Precipitation	4	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	4	1	1	4
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	40.0
AQ-PM	9.46
AQ-DPM	43.9
Drinking Water	36.4
Lead Risk Housing	63.4
Pesticides	0.00
Toxic Releases	4.60
Traffic	17.1
Effect Indicators	—
CleanUp Sites	68.9
Groundwater	83.2
Haz Waste Facilities/Generators	22.4
Impaired Water Bodies	12.5
Solid Waste	0.00
Sensitive Population	—
Asthma	58.8
Cardio-vascular	55.7
Low Birth Weights	40.5
Socioeconomic Factor Indicators	—
Education	38.5
Housing	78.5

Linguistic	10.4
Poverty	57.3
Unemployment	11.9

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	26.16450661
Employed	23.52110869
Median HI	17.01527011
Education	—
Bachelor's or higher	38.31643783
High school enrollment	22.2764019
Preschool enrollment	34.98011036
Transportation	—
Auto Access	23.89323752
Active commuting	70.42217375
Social	—
2-parent households	32.60618504
Voting	64.26279995
Neighborhood	—
Alcohol availability	56.5635827
Park access	16.2068523
Retail density	38.00846914
Supermarket access	23.11048377
Tree canopy	92.62158347

Housing	—
Homeownership	47.45284229
Housing habitability	21.44232003
Low-inc homeowner severe housing cost burden	41.51161299
Low-inc renter severe housing cost burden	1.385859104
Uncrowded housing	64.30129603
Health Outcomes	—
Insured adults	59.36096497
Arthritis	3.0
Asthma ER Admissions	19.8
High Blood Pressure	15.1
Cancer (excluding skin)	15.0
Asthma	7.7
Coronary Heart Disease	4.7
Chronic Obstructive Pulmonary Disease	2.1
Diagnosed Diabetes	38.1
Life Expectancy at Birth	5.2
Cognitively Disabled	0.5
Physically Disabled	1.8
Heart Attack ER Admissions	46.2
Mental Health Not Good	21.2
Chronic Kidney Disease	14.8
Obesity	22.5
Pedestrian Injuries	92.1
Physical Health Not Good	21.1
Stroke	10.1
Health Risk Behaviors	—

Binge Drinking	50.7
Current Smoker	11.7
No Leisure Time for Physical Activity	43.3
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	51.6
Elderly	24.7
English Speaking	94.8
Foreign-born	1.0
Outdoor Workers	25.7
Climate Change Adaptive Capacity	—
Impervious Surface Cover	84.3
Traffic Density	11.5
Traffic Access	0.0
Other Indices	—
Hardship	56.5
Other Decision Support	—
2016 Voting	49.1

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	32.0
Healthy Places Index Score for Project Location (b)	32.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Per the Project Description, it will take approximately 3 weeks to complete demolition of the Old Juvenile Hall Justice Center.
Land Use	Overall area containing the building and associated improvements is approximately 3 acres.
Construction: Dust From Material Movement	Demolition is the only phase proposed for the project. Quantity of material exported per Project Description.
Construction: Off-Road Equipment	Equipment list per Project Description.
Construction: Trips and VMT	Hauling trips per day is based on the Project Description which estimates 15,400 cubic yards of exported material over an approximately 21-day period (haul truck capacity assumed to be 16 cubic yards). Hauling trip length based on distance from the project site to the West Central Landfill (10 miles).

Attachment B

Biological Resources Report

ENPLAN

20-50
April 28, 2010

John Strahan
Shasta County Department of Public Works
1855 Placer Street
Redding, CA 96001

SUBJECT: Biological Study and Wetland Screening for Expansion of Juvenile Hall Facility

This is to confirm that ENPLAN has conducted a biological study and wetland screening for Shasta County's proposed expansion of the existing juvenile hall facility along Radio Lane, in the City of Redding. As shown in Figure 1, the study site is located in the San Buenaventura Land Grant of the U.S. Geological Survey's Redding, Calif. 7.5-minute quadrangle. The site is relatively flat and is situated at approximately 480 feet above sea level. Much of the study area is occupied by the existing juvenile hall facility, which consists of administrative buildings, paved parking areas for staff and visitors, inmate classrooms, a basketball court, a garden, and a grass field for recreation. Horse stalls that are part of the adjacent animal shelter facility are located just east of the study site.

The County proposes to replace the existing 56-bed facility with a new 90-bed juvenile rehabilitation facility between the existing juvenile hall facility and the Shasta County Animal Shelter. The entire facility, including the building, outdoor recreation areas, parking lots, and landscaping will encompass approximately 4.5 acres. The existing juvenile hall would continue to operate until completion of the new facility, at which time the existing facility would be vacated for future use by the County.

Records Review

Records reviewed for this evaluation consisted of California Natural Diversity Data Base (CNDDB, November 2009 data) records, soils records maintained by the U.S. Department of Agriculture's Natural Resources Conservation Service, and National Wetlands Inventory (NWI) maps (U.S. Fish and Wildlife Service, no date). The CNDDB records search covered a 10-mile radius around the project site (consisting of portions of the Shasta Dam, Project City, Whiskeytown, Ono, Igo, Redding, Enterprise, Palo Cedro, Bella Vista, Olinda, Cottonwood, and Balls Ferry quadrangles). Soil records maintained by the Natural Resources Conservation Service were reviewed to determine the soil types on the site and their potential to support wetlands. The NWI maps for the Redding and Enterprise quadrangles were reviewed to determine if wetlands features have been previously mapped on the site or surrounding vicinity.

Soils

According to the U.S. Department of Agriculture, Natural Resources Conservation Service[1], two soil units occur in the study area: Honcut gravelly loam and Tehama loam, 0 to 3 percent slopes. These soil units are not hydric (i.e., capable of supporting wetlands), although Tehama loam may contain inclusions of hydric soils.

Field Reconnaissance

The botanical and wildlife surveys were conducted on November 19, 2009, and January 28, 2010. Most of the special-status species potentially occurring in the area would not have been evident at the time the fieldwork was conducted. However, the potential presence of species not readily identifiable during the field studies was determined on the basis of observed habitat characteristics.

Plant Communities/Wildlife Habitats

Most of the study area has been previously developed or altered from its natural state. Numerous ornamental trees and shrubs have been planted around buildings, and turf grasses have become established in recreation areas. Buildings and trees in the study area provide suitable nesting habitat for migratory birds and roosting habitat for bats. Turf grasses provide foraging habitat for robins and other birds that feed on grubs.

Oregon Gulch flows eastward across the northern portion of the study area. Oregon Gulch drains the foothills west of the City of Redding. Historically, the stream was a seasonal tributary of the Sacramento River, but it is now sustained in summer by irrigation leakage from the Anderson-Cottonwood Irrigation District (ACID) canal and urban runoff. The stream has been heavily impacted by human activities, including residential and commercial development along its banks, bank degradation from off-road vehicles, and illegal dumping of trash. Riparian vegetation along the lower reaches is well developed. In the middle and upper stream reaches (well upstream of the study area), riparian vegetation is sparse, and is supplanted by blue oaks and gray pines. Oregon Gulch is utilized by salmonids, treefrogs, garter snakes, and aquatic invertebrates.

In the study area, the canopy along Oregon Gulch consists primarily of valley oak, interior live oak, and willows; the shrub layer includes Himalayan blackberry, blue elderberry, and California grape. Trees and shrubs along the stream provide nesting/roosting habitat for a variety of migratory bird species and bats. Overall, Oregon Gulch and the adjacent riparian forest have very high values to fish and wildlife species. As part of its review of environmental documents prepared for the development project, DFG may request a development set-back along Oregon Gulch to protect aquatic and riparian values. If required, the set-back would likely be 25 feet from the riparian dripline, or 50 feet from the top of the stream bank, whichever is greater.

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[1] USDA, Natural Resources Conservation Service (NRCS). 2009. Web Soil Survey, last updated April 17, 2008. http://websoilsurvey.nrcs.usda.gov/app/.

The ACID canal flows southward along the western site boundary. The canal conveys water diverted from the Sacramento River to farmers in southern Shasta County and northern Tehama County between April 1 and October 31. The canal provides foraging habitat for a variety of waterfowl and mosquitofish.

Project implementation would not affect the ACID canal and would have minimal effects on the Oregon Gulch riparian corridor. No trees would be removed from the riparian corridor; however, some trees in the northeast corner of the site may need to be pruned to allow construction of the security fence.

Wetlands and Other Waters of the United States

Review of the National Wetland Inventory maps for the Redding and Enterprise quadrangles showed one stream (Oregon Gulch) on the subject site, as well as five stream features (the ACID canal, Oregon Gulch, Sacramento River, Canyon Hollow, and an unnamed tributary to Canyon Hollow) and two perennial ponds within a half-mile of the study area.

ENPLAN inspected the site for the presence of wetlands and other waters of the United States. Field reconnaissance of the site identified a portion of Oregon Gulch and the ACID canal on the subject site. In addition, a constructed roadside ditch is present along Radio Lane as well as two minor channels adjacent to Oregon Gulch. The locations of these features are shown in Figure 2. Oregon Gulch is directly tributary to the Sacramento River, a Traditional Navigable Water, and is therefore subject to Corps' jurisdiction. Oregon Gulch in the study area averages approximately 20 feet wide (detailed measurements were not recorded). The constructed ditch along Radio Lane is lined with cobble and geotextile fabric. The ditch was constructed for irrigation purposes; a gate on the ACID canal can be opened to divert water into the ditch, but is apparently not currently used. Inspection of the ditch following significant precipitation events showed that it does not carry any appreciable storm water runoff volume. Given these conditions, the ditch is not subject to Corps jurisdiction. Two short scour channels were identified along Oregon Gulch on the eastern side of the site, approximately 50 and 115 feet north of the horse stalls. These channels drain the small pasture area to the immediate east. Such erosional features are generally not subject to Corps jurisdiction, but avoidance of these features is recommended nonetheless.

A short swale was also observed on the northern side of the site, near Oregon Gulch. However, investigation showed that this created feature does not connect to Oregon Gulch, does not have hydric soils, and although it is partially covered by Himalayan blackberry, the annual vegetation emerging from the blackberries consists of upland species such as ripgut brome. Therefore, this feature is not subject to Corps jurisdiction. No wetlands were identified during the field inspection.

Because all potentially jurisdictional waters will be fully avoided, Section 401 (Water Quality Certification) and 404 (Department of the Army) permits are not required.

Special-Status Species

Special-Status Plant Species

Review of CNDDB records showed that no special-status plant species have been previously reported on the site. Ten special-status plant species are known to occur in the site vicinity: Ahart's paronychia, fox sedge, Henderson's bent grass, legenere, Nuttall's ribbon-leaved pond weed, Red Bluff dwarf rush, silky cryptantha, slender Orcutt grass, slender silver-moss, and woolly meadowfoam (Table 1). Three additional special-status plant species not reported in the CNDDB, but known to occur within the search radius, include depauperate milk vetch (A California Native Plant Society List 4.3—Plants with a Limited Distribution; Not Very Threatened in California), Sanborn's onion (A California Native Plant Society List 4.2—Plants with a Limited Distribution; Fairly Threatened in California), and tripod buckwheat (A California Native Plant Society List 4.2).

No special-status plant species were observed during the botanical field evaluation. However, Oregon Gulch has a moderate potential to support fox sedge. Fox sedge is not state or federally listed, but is on California Native Plant Society List 2.2 (Plants Rare, Threatened, or Endangered in California, but more Common Elsewhere). Fox sedge prefers sites with a consistent water level throughout summer, such as irrigation ditches, perennial ponds, and perennial or near-perennial streams. The species could be present in Oregon Gulch because flow is sustained during the summer by urban runoff, canal seepage, and irrigation tail-off water. Fox sedge would not have been identifiable at the time of the botanical survey. However, the sedge (if present) would not be affected by project implementation because no work is proposed in or adjacent to the low-flow stream channel. No additional botanical field evaluation is recommended. A list of plant species observed during the field evaluation is enclosed.

Special-Status Animal Species

Review of CNDDB records showed that no special-status animal species have been previously reported on the site. Seventeen special-status animal species are known to occur in the site vicinity: bald eagle, bank swallow, Central Valley spring-run Chinook salmon, foothill yellow-legged frog, hoary bat, northwestern pond turtle, osprey, Pacific fisher, pallid bat, Sacramento River winter-run Chinook salmon, Shasta salamander, silver-haired bat, spotted bat, tricolored blackbird, valley elderberry longhorn beetle (VELB), vernal pool fairy shrimp, and vernal pool tadpole shrimp (Table 1). The CNDDB records search also identified seven non-status wildlife species within the search radius: California linderiella, kneecap lanx, long-eared myotis, Oregon shoulderband, Shasta chaparral, western red bat, and Yuma myotis. Four additional special-status fish species not reported in the CNDDB, but known to occur in the vicinity, include Central Valley fall-run Chinook salmon (a federal and state Species of Concern), Central Valley late fall-run Chinook salmon (a federal and state Species of Concern), Central Valley steelhead (a federal Threatened species), and green sturgeon (a federal Threatened species).

One special-status animal species, the bald eagle, was observed soaring over the study area during the wildlife survey. However, field inspection confirmed that no eagle nests

are present in the study area. Eleven special-status animal species could potentially utilize habitats on the site. These species are Chinook salmon (fall-run, late fall-run, winter-run, and spring-run), Central Valley steelhead, northwestern pond turtle, hoary bat, pallid bat, silver-haired bat, spotted bat, and VELB. An evaluation of the potential effects of project implementation on these species is presented below. A checklist of animal species observed during the wildlife survey is enclosed.

VELB. A number of elderberry shrubs were identified along Oregon Gulch during the field inspection (Figure 2). The elderberries have a moderate potential to provide suitable habitat for the VELB, a federal Threatened species. The USFWS considers elderberry shrubs with a basal diameter of one inch or greater at ground level as potentially providing habitat for the VELB. All of the elderberry shrubs appeared to have stems greater than one inch in diameter at ground level. Construction of a parking lot, emergency access road, and security fencing is proposed within 100 feet of the elderberry clusters.

If the proposed project received federal funding or were subject to federal permits, the federal lead agency could request Endangered Species Act consultation with the U. S. Fish and Wildlife Service because work would occur within 100 feet of the elderberries. However, the project is not federally funded and is not subject to federal permits. The proposed project has been designed to avoid the need for removal of elderberries and to provide a minimum 20-foot separation between the constructed facilities and elderberries. Nonetheless, consistent with typical U.S. Fish and Wildlife Service recommendations, the following mitigation measures are proposed:

- Protective fencing (temporary or permanent) shall be installed a minimum distance of 20 feet from the driplines of the elderberry shrubs prior to the start of construction. The protective fencing shall be periodically inspected and be maintained as needed for the duration of the proposed work to ensure that no elderberry shrubs are harmed.
- Construction workers shall be briefed on the need for elderberry protection prior to the start of construction. The briefing shall address the locations of the elderberry shrubs, the need for maintenance of appropriate buffers from the shrubs, and the consequences resulting from damage to the shrubs. Attendance and receipt of training shall be documented on a sign-in sheet, which shall be maintained in County files.

Chinook Salmon and Central Valley Steelhead. Within the study area, Oregon Gulch is bordered by dense riparian vegetation along its banks and has suitable spawning habitat for salmonids. Chinook salmon and Central Valley steelhead are known to utilize this stream reach for spawning and/or rearing. Critical habitat is designated for Central Valley steelhead in Oregon Gulch from its confluence with the Sacramento River to ¾-mile upstream, and includes the stream reach within the study area. ENPLAN contacted ACID and confirmed that fish screens have been installed at the ACID canal in-take on the Sacramento River; thus, special-status fish species would not be present in this feature. The Corps of Engineers and National Marine Fisheries

Service would not have any comments regarding fisheries protection provided that no work is proposed in the bed and/or banks of Oregon Gulch (which the County has confirmed).

Indirect effects to Chinook salmon and Central Valley steelhead could potentially occur if sediment-laden storm water runoff from the site enters Oregon Gulch and degrades spawning or rearing habitat downstream. Indirect impacts can be avoided through implementation of the following measure.

- To avoid indirect adverse effects on Chinook salmon and Central Valley steelhead, on-site earth-moving construction activities shall be restricted to the dry season, Best Management Practices for erosion control shall be implemented, and storm water runoff shall be pre-treated prior to its release.

Northwestern Pond Turtle. Although not observed during the wildlife survey, northwestern pond turtles have a high potential to be present in pools that persist throughout the summer in Oregon Gulch. Potential direct impacts on the northwestern pond turtle will be avoided because no work is proposed in Oregon Gulch. Potential indirect impacts will be avoided by restricting on-site, earth-moving construction activities to the dry season; implementing Best Management Practices for erosion control; and pre-treating storm water runoff prior to its release.

Bats. Hoary bats, pallid bats, and silver-haired bats have a moderate potential to roost in trees on the site, while spotted bats have a moderate potential to roost in buildings on the site. No evidence of bat roosting was observed on the buildings proposed to be dismantled, or elsewhere on the site. Given the extent of suitable roosting habitat elsewhere in the vicinity, site development should have a negligible effect on these bat species. No mitigation measures are warranted for potential impacts to bat species.

Nesting Migratory Birds

Eight abandoned bird nests were observed on or immediately adjacent to the site; their locations are shown in Figure 2. Three nests were constructed by cliff swallows on inmate classrooms proposed to be removed, and a large stick-nest, likely constructed by a yellow-billed magpie, was constructed in a valley oak behind the classrooms. The remaining four nests were observed in mature trees occurring along Oregon Gulch. The Migratory Bird Treaty Act requires that nesting migratory birds not be adversely affected. To ensure compliance with the Act, vegetation and/or buildings should be removed from the site outside of the nesting season. In the local area, most birds nest between March 1 and July 31. Implementation of the following measure would ensure that nesting migratory birds are not adversely affected.

- To ensure that active nests of raptors and migratory birds are not disturbed, vegetation removal and building demolition shall be avoided during the nesting season (generally March 1 to July 31), to the extent possible. If vegetation removal or building demolition must occur during the nesting season, a focused survey shall be conducted by a qualified biologist to identify active nests in and adjacent to the work areas. The survey shall be conducted no more than 14

days prior to the beginning of building demolition or tree removal. If nesting birds are found during the focused survey, the nest tree(s)/building(s) shall not be removed until after the young have fledged. Further, to prevent nest abandonment and mortality of chicks and eggs, no construction shall occur within 500 feet of an active nest, unless a smaller buffer zone is authorized by the Department of Fish and Game (the size of the construction buffer zone may vary depending on the species of nesting birds present).

Resource Agency Permit Requirements

Oregon Gulch and the ACID canal are subject to the jurisdiction of the Corps of Engineers, Regional Water Quality Control Board, and/or Department of Fish and Game, and the two erosional scours on the eastern side of the site could potentially fall under jurisdiction of these agencies. However, the County has confirmed that no work is proposed in any of these features. Therefore, resource agency permits are not required with respect to these features.

As for all projects resulting in disturbance of more than one acre, a Notice of Intent/General Construction Activity Storm Water Permit (and Storm Water Pollution Prevention Plan) is required. Various other permits and approvals may also be required by other agencies (e.g., encroachment permits), but are beyond the scope of this review.

Conclusions and Recommendations

In summary, we find that the project site has the potential to support a number of sensitive biological resources. These include stream and riparian habitats, fox sedge, Chinook salmon, Central Valley steelhead, northwestern pond turtles, VELB, hoary bats, pallid bats, silver-haired bats, spotted bats, and nesting migratory birds.

The project design has been refined to incorporate a number of measures to ensure that these resources are not adversely affected. Specifically, no work is proposed in Oregon Gulch, the ACID canal, or the erosional scours on the east side of the site; no trees will be removed from the Oregon Gulch riparian corridor; facilities will be sited at least 20 feet from elderberries; and storm water runoff will be pre-treated through the use of an infiltration gallery. These design measures, combined with the following mitigation measures, will ensure that no significant adverse impacts to biological resources occur as a result of project implementation.

- Protective fencing (temporary or permanent) shall be installed a minimum distance of 20 feet from the driplines of the elderberry shrubs prior to the start of construction. The protective fencing shall be periodically inspected and be maintained as needed for the duration of the proposed work to ensure that no elderberry shrubs are harmed.
- Construction workers shall be briefed on the need for elderberry protection prior to the start of construction. The briefing shall address the locations of the elderberry shrubs, the need for maintenance of appropriate buffers from the shrubs, and the consequences resulting from damage to the shrubs. Attendance

and receipt of training shall be documented on a sign-in sheet, which shall be maintained in County files.

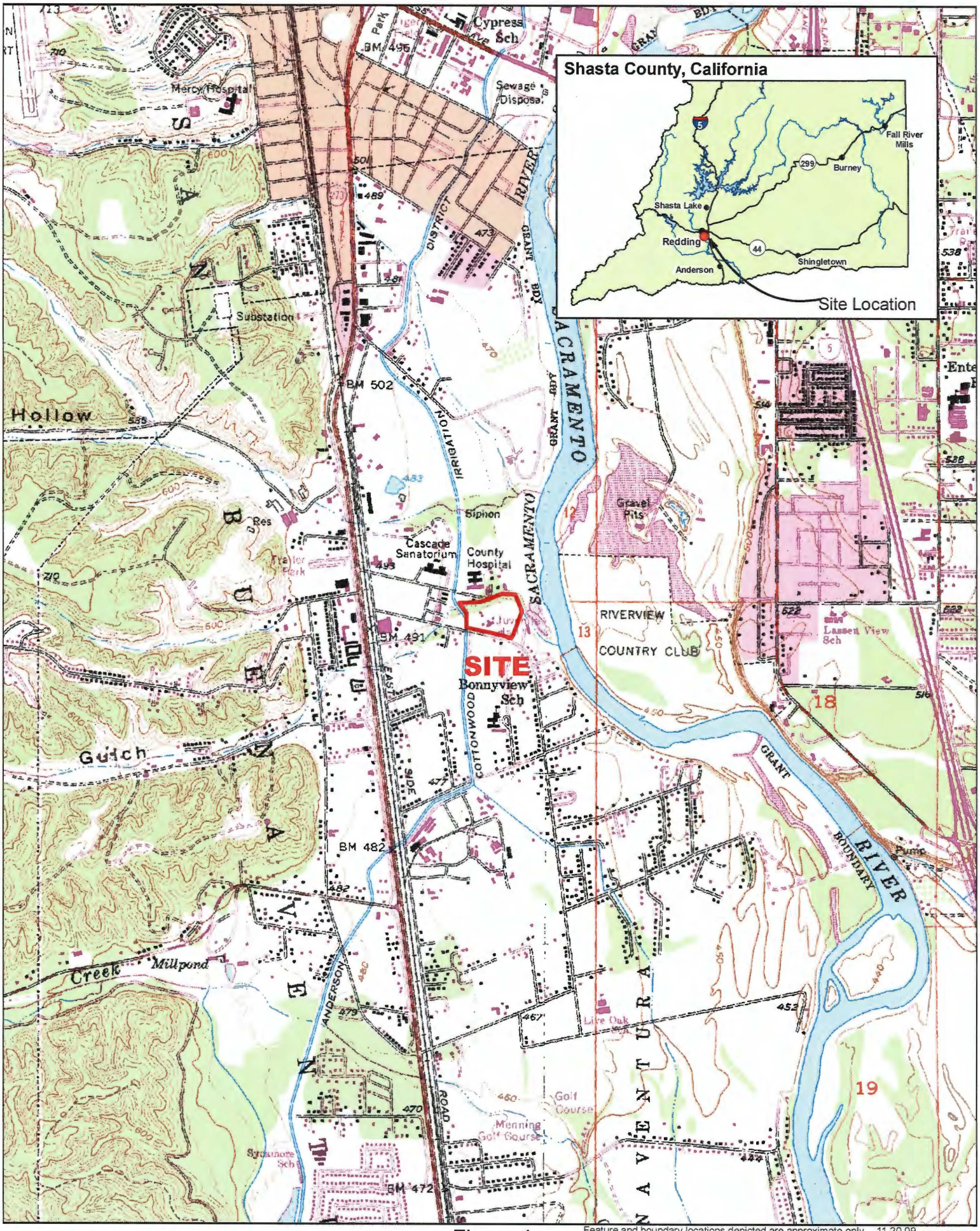
- To avoid indirect adverse effects on Chinook salmon, Central Valley steelhead, and northwestern pond turtles, on-site, earth-moving construction activities shall be restricted to the dry season; Best Management Practices for erosion control shall be implemented; and storm water runoff shall be pre-treated prior to its release.
- To ensure that active nests of raptors and migratory birds are not disturbed, vegetation removal and building demolition shall be avoided during the nesting season (generally March 1 to July 31), to the extent possible. If vegetation removal or building demolition must occur during the nesting season, a focused survey shall be conducted by a qualified biologist to identify active nests in and adjacent to the work areas. The survey shall be conducted no more than 14 days prior to the beginning of building demolition or tree removal. If nesting birds are found during the focused survey, the nest tree(s)/building(s) shall not be removed until after the young have fledged. Further, to prevent nest abandonment and mortality of chicks and eggs, no construction shall occur within 500 feet of an active nest, unless a smaller buffer zone is authorized by the Department of Fish and Game (the size of the construction buffer zone may vary depending on the species of nesting birds present).

Please contact Don Burk or me if you have any questions regarding our findings or recommendations.

Sincerely,

Darrin Doyle
Wildlife Biologist

Enclosures: Figure 1. Vicinity Map
Figure 2. Site Design with Elderberry Shrub Locations and Nests
Table 1. CNDDB Reports Summary
Checklist of Vascular Plants Observed
Checklist of Wildlife Species Observed



Feet
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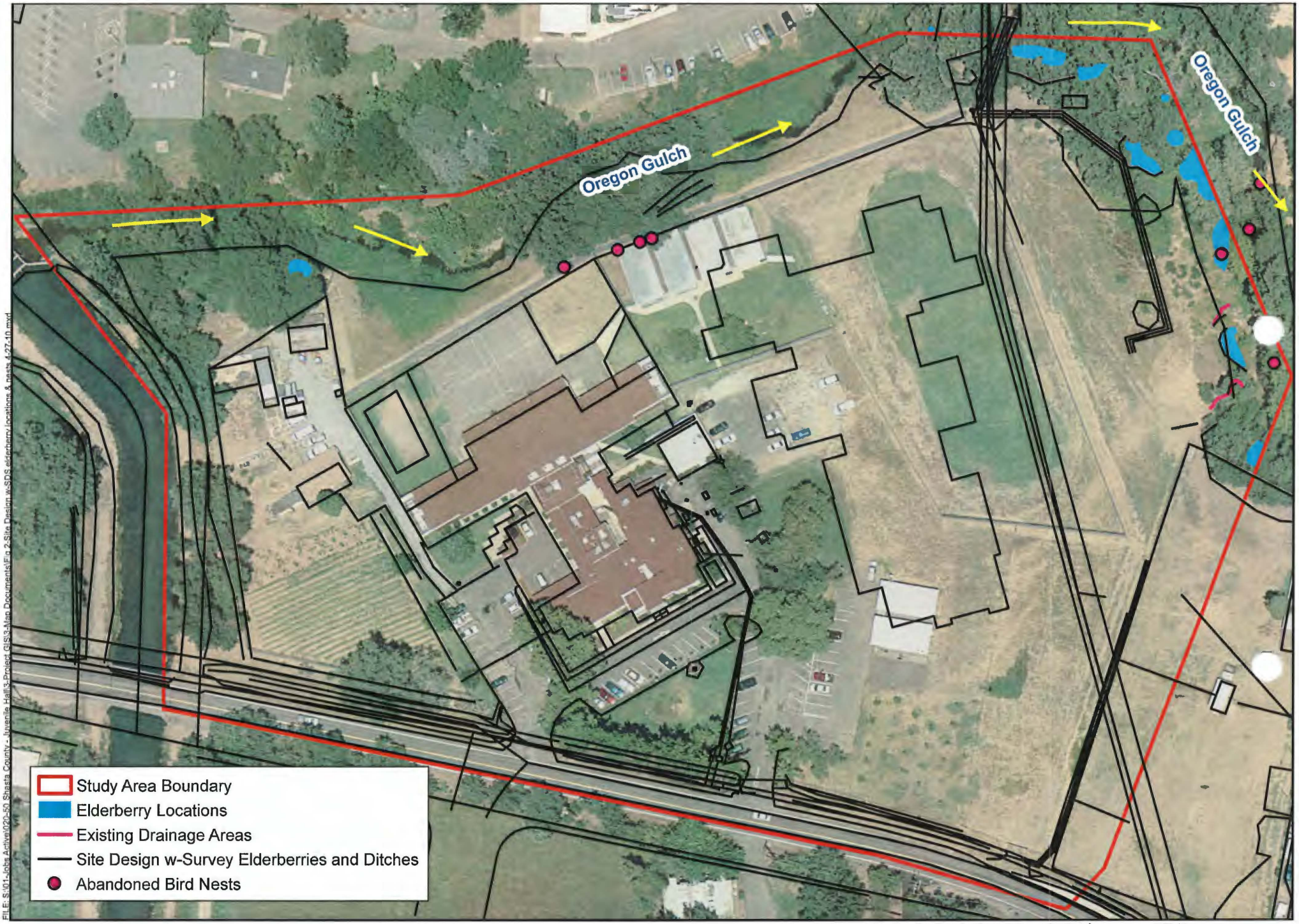
2,000

Feature and boundary locations depicted are approximate only. 11-20-09

Figure 1

Vicinity Map

ENPLAN



Feature and boundary locations depicted are approximate only.

4-27-10

Figure 2

0 100 Feet

Site Design with Elderberry Shrub Locations and Nests

ENPLAN

Table 1. Rarefind (CNDDB) Report Summary (November 2009 Data)

Listed Element	Quadrangle[1]									Status[2]
	SH	PR	IG	EN	RE	PA	OL	CO	BA	
Animals										
Bald eagle			•							FD, SE
Bank swallow				•					•	ST
California linderiella				•		•		•	•	None
Central Valley spring-run Chinook salmon				•	•		•			FT, ST
Foothill yellow-legged frog	•		•							SSC
Hoary bat								•		SSC
Kneecap lanx					•					None
Long-eared myotis			•							None
Northwestern pond turtle		•	•	•	•		•		•	SSC
Oregon shoulderband					•					None
Osprey								•		SSC
Pacific fisher			•							FC, SSC
Pallid bat							•			SSC
Sacramento River winter-run Chinook salmon				•	•			•	•	FE, SE
Shasta chaparral				•	•					None
Shasta salamander	•									ST
Silver-haired bat			•	•						SSC
Spotted bat						•				SSC
Tricolored blackbird								•		SSC
Valley elderberry longhorn beetle				•				•		FT
Vernal pool fairy shrimp				•		•		•	•	FT
Vernal pool tadpole shrimp				•		•		•	•	FE
Western red bat			•					•		None
Yuma myotis			•					•		None
Plants										
Ahart's paronychia						•				1B.1
Fox sedge								•		2.2
Henderson's bent grass				•		•		•	•	3.2
Legenere				•					•	1B.1
Nuttall's ribbon-leaved pond weed			•							2.2
Red Bluff dwarf rush				•			•	•	•	1B.1
Silky cryptantha		•		•		•		•	•	1B.2
Slender Orcutt grass				•		•		•	•	FT, SE, 1B.1
Slender silver-moss			•							2.2
Woolly meadowfoam						•				4.2
Natural Communities										
Great Valley cottonwood riparian forest				•	•			•	•	None
Great Valley valley oak riparian forest				•				•	•	None
Great Valley willow scrub				•				•		None

Highlighting denotes the quadrangle in which the project site is located. No occurrences were reported inside the study radius in the Whiskeytown, Bella Vista, and Ono quadrangles.

[1]Quadrangle Code

SH = Shasta Dam	EN = Enterprise	OL = Olinda
PR = Project City	RE = Redding	CO = Cottonwood
IG = Igo	PA = Palo Cedro	BA = Balls Ferry

[2]Status Codes

Federal/State

FE = Federally Listed – Endangered	FD = Federally Delisted	SSC = State Species of Concern (CDFG)
FT = Federally Listed – Threatened	SE = State Listed – Endangered	
FC = Federal Candidate Species	ST = State Listed – Threatened	

California Native Plant Society

1B.1 = Plants Rare, Threatened or Endangered in California and Elsewhere; Seriously Threatened in California
1B.2 = Plants Rare, Threatened or Endangered in California and Elsewhere; Fairly Threatened in California
2.2 = Plants Rare, Threatened, or Endangered in California Only; Fairly Threatened in California
3.2 = More Information is Needed; Fairly Threatened in California
4.2 = Plants of Limited Distribution – A Watch List; Fairly Threatened in California

Checklist of Vascular Plant Species Observed

Juvenile Hall

November 19, 2009

Anacardiaceae	**Sumac Family**
Toxicodendron diversilobum	Poison-oak
Apiaceae	**Carrot Family**
Torilis arvensis	Field hedge-parsley
Apocynaceae	**Dogbane Family**
Nerium oleander	Oleander
Aristolochiaceae	**Birthwort Family**
Aristolochia californica	Pipevine
Asteraceae	**Sunflower Family**
Centaurea solstitialis	Yellow star thistle
Cichorium intybus	Chicory
Cirsium sp.	Thistle
Conyza sp.	Horseweed
Lactuca serriola	Prickly lettuce
Senecio vulgaris	Old-man-in-the-Spring
Sonchus asper ssp. *asper*	Prickly sow thistle
Taraxacum officinale	Dandelion
Betulaceae	**Birch Family**
Alnus rhombifolia	White alder
Bignoniaceae	**Trumpet-creeper Family**
Catalpa speciosa	Northern catalpa
Brassicaceae	**Mustard Family**
Capsella bursa-pastoris	Shepherd's purse
Hirschfeldia incana	Shortpod mustard
Caprifoliaceae	**Honeysuckle Family**
Sambucus mexicana	Blue elderberry
Caryophyllaceae	**Pink Family**
Spergularia rubra	Ruby sand spurry
Stellaria media	Common chickweed
Convolvulaceae	**Morning Glory Family**
Convolvulus arvensis	Bindweed
Cyperaceae	**Sedge Family**
Cyperus eragrostis	Nutsedge
Fabaceae	**Legume Family**
Albizia julibrissin	Silk tree
Cercis occidentalis	Western redbud
Robinia pseudoacacia	Black locust
Trifolium spp.	Clovers
Vicia villosa	Winter vetch
Fagaceae	**Oak Family**
Quercus lobata	Valley oak
Quercus x morehus	Oracle oak
Quercus wislizenii	Interior live oak

Checklist of Vascular Plant Species Observed

Juvenile Hall

Geraniaceae	**Geranium Family**
Erodium botrys	Long-beaked filaree
Erodium cicutarium	Red-stemmed filaree
Erodium moschatum	White-stemmed filaree
Geranium molle	Dove's-foot geranium
Hypericaceae	**St. John's-wort Family**
Hypericum perforatum	Klamath weed
Juglandaceae	**Walnut Family**
Juglans californica var. *hindsii*	Northern California black walnut
Lamiaceae	**Mint Family**
Lamium purpureum	Red henbit
Marrubium vulgare	Horehound
Liliaceae	**Lily Family**
Allium sp. (*vineale*?)	Onion
Malvaceae	**Mallow Family**
Malva sp.	Mallow
Moraceae	**Mulberry Family**
Morus sp.	Mulberry
Phytolaccaceae	**Pokeweed family**
Phytolacca americana	Pokeweed
Plantaginaceae	**Plantain Family**
Plantago lanceolata	English plantain
Platanaceae	**Sycamore Family**
Platanus sp.	Sycamore
Poaceae	**Grass Family**
Avena sp.	Wild oats
Bromus diandrus	Ripgut grass
Cynodon dactylon	Bermuda grass
Digitaria sp.	Crabgrass
Leersia oryzoides	Rice cutgrass
Panicum sp.	Panic grass
Paspalum dilitatum	Dallis grass
Setaria sp.	Bristlegrass
Sorghum halepense	Johnson grass
Polygonaceae	**Buckwheat Family**
Polygonum arenastrum	Common knotweed
Rumex sp.	Dock
Rumex crispus	Curly dock
Ranunculaceae	**Buttercup Family**
Ranunculus muricatus	Prickle-fruited buttercup
Rosaceae	**Rose Family**
Prunus sp.	Prunus
Pyracantha sp.	Pyracantha
Rosa sp.	Wild rose
Rubus discolor	Himalayan blackberry

Checklist of Vascular Plant Species Observed

Juvenile Hall

Salicaceae	**Willow Family**
Salix exigua	Sandbar willow
Salix gooddingii	Goodding's black willow
Salix laevigata	Red willow
Scrophulariaceae	**Snapdragon Family**
Verbascum blattaria	Moth mullein
Simaroubaceae	**Quassia Family**
Ailanthus altissima	Tree of heaven
Vitaceae	**Grape Family**
Vitis californica	Wild grape

Checklist of Wildlife Species Observed
Juvenile Hall Expansion Project

Common Name	Scientific Name	Status
BIRDS		
Acorn woodpecker	*Melanerpes formicivorus*	None
American crow	*Corvus branchyrhynchos*	None
American robin	*Turdus migratorius*	None
Bald eagle	*Haliaeetus leucocephalus*	Federally Delisted, State Endangered
Band-tailed pigeon	*Columba fasciata*	None
Brewer's blackbird	*Euphagus cyanocephalus*	None
California quail	*Callipepla californica*	None
Cliff swallow	*Hirundo pyrrhonota*	None
Mallard	*Anas platyrhynchos*	None
Red-tailed hawk	*Buteo jamaicensis*	None
Western scrub-jay	*Aphelocoma californica*	None
Yellow-billed magpie	*Pica nuttalli*	None
MAMMALS		
Gopher	*Thomomys* sp.	None
Raccoon	*Procyon lotor*	None
FISH		
Unidentified minnows		

Attachment C

Structural Surveys for Special-Status Bat Species

Swaim Biological, Incorporated
4435 First Street PMB #312
Livermore, CA 94551

TO	Scott Wahl, Shasta County Department of Public Works
FROM	Ryan Byrnes, Swaim Biological Incorporated
DATE	September 7, 2023
SUBJECT	Old Juvenile Justice Center Demolition Project – Structural Surveys for Special-Status Bat Species, Shasta County, California.

1. INTRODUCTION AND BACKGROUND

Per Shasta County Department of Public Works request, Swaim Biological Incorporated (SBI) has conducted habitat and occupancy surveys for special status bat species at the Old Juvenile Justice Center Demolition Project in August 2023. SBI's qualified biologists surveyed structures internally and eternally for roosting bats and identified points of bat ingress and exit points in preparation for structure demolition project. One (1) daytime internal bat roost and two (2) night emergence surveys were conducted at the Old Juvenile Justice Center. This report details the methods used to detect bats and provides a summary of our survey results and recommendations to avoid potential impacts to roosting bats.

2. METHODS

Surveys for bats are difficult to standardize because of the large amount of variability that exists at individual survey sites and among survey sites in a project area, much less across the range of a species. Nevertheless, several practices were used to survey for roosting bats, including; bat habitat assessments, daytime roost and signs of bats use surveys (i.e., guano pellets and urine staining), emergence surveys, and acoustic surveys.

SBI biologists conducted a daytime bat survey at the Old Juvenile Justice Center to determine if the structures were currently in use by bats and where bats may be accessing the Justice Center. During these surveys, the biologists inspected habitat features on the interior (to the greatest extent practicable) and exterior of the structure searching for bats or signs of bat occupancy including maternity roosts, day roosting bats, guano pellets, and urine staining.

The bat emergence and acoustic surveys began one-half hour before sunset and continued until at least one and one-half hour after sunset or until it was otherwise too dark to see emerging bats. Surveyors positioned themselves so that emerging bats would be silhouetted against the sky as they exited the roost.

A thermal scope (ATN OTS-HD 640 1-10x, 640x480, 19 mm, Thermal Monocular), and night vision (Armasight Discovery5x-3 Alpha Gen 3 Night Vision Binocular) were used to complement and aid surveyors in visual detection of emerging bats (Photo 1). Surveyors were close enough to the roost to observe all exiting bats, but not close enough to influence emergence. Acoustic detectors were deployed in conjunction with emergence survey efforts to monitor bat activity within the proposed project area and attempt to identify emerging bat species. Bat vocalization calls were recorded with SonoBatLIVE (using the Petterson M500 USB mic), and Pettersson D500x (bat acoustical detectors). Bat vocalization files were analyzed and manually vetted through SonoBat 4.4 using the SonoVet utility (bat call analysis software) by qualified biologists.

On August 23, 2023, two acoustic bat detectors (Pettersson D500X) were deployed at the Ole Juvenile Justice Center for two nights to identify bat species and monitor bat activity (Photo 2). The placement of bat detectors was based on recommendations and guidance from the North American Bat Monitoring Program Regional Protocol for Surveying with Stationary Deployments of Echolocation Recording Devices, Version 1.0, Pacific Northwestern US (Rodriguez et. al., 2019). Pettersson D500X detectors were operational from 7:00 pm (before sunset) to 7:30 am (after sunrise) on August 23, 2023 – August 25, 2023. Bat emergence period is defined here as the first hour after sunset, approximately 7:45 – 8:45 pm. Bat roosting period is defined here as the last hour before sunrise, approximately 5:00 – 6:00 am. The Pettersson D500X detector microphones were elevated 3-4 meters above the ground to record activity adjacent to the Old Juvenile Justice Center, sampling bats that passed within 10-30 meters of the microphone. The directional microphone horn was left on to eliminate extraneous non-bat noise recordings like wind or crickets. The D500 profile settings were: SAMP. FREQ = 500 kHz, PRETRIG = 0, REC. LEN = 4, HP-FILTER = OFF, T. SENSE = MEDIUM. Recording settings were: INPUT GAIN: 45, TIG LEV = 80, Interval = 0.

3. SURVEY RESULTS

Survey results for each survey location are provided below. Descriptions of recommendations for all sites are compiled at the end of the report (Section 4).

SUMMARY

Internal and external bat daytime roost surveys for the Old Juvenile Justice Center were conducted on August 23rd and 24th, 2023, by SBI biologists Ryan Byrnes and Matt Beyers. Night emergence surveys were also conducted at the Old Juvenile Justice Center on August 23rd and 24th, 2023, by SBI biologists Ryan Byrnes and Matt Beyers. No day roosting bats were observed during the daytime bat roost internal and external surveys. In addition, no bats were observed emerging from the Old Juvenile Justice Center during either of the night emergence surveys.

STRUCTURE

The Old Juvenile Justice Center is a large single-storied building with large administrative offices, control rooms, multiple holding cells/bedrooms, large social rooms for inmates, large bay windows, and a

Juvenile Court House. To the north of the Old Juvenile Justice Center is the Oregon Gulch riparian corridor leading to the Scramento River, consisting of large oaks (*Quercus sp.*) and willows (*Salix sp.*). Numerous ornamental trees and shrubs have been planted around the Old Juvenile Justice Center and nonnative grassland/lawn surround the building. The structure has a few windowsills and eave overhands with decaying and rotting wood. The structure's south and east facing walls and roof receive direct sunlight throughout the morning and afternoon and is partially shaded by large trees in the evening.

RESULTS

The Old Juvenile Justice Center has suitable open/cavity and crevice bat roost habitat within the structure (Photo 3). In addition, multiple locations were observed where bats can access the inside of the building (Photos 4 – 5). Moreover, multiple locations on the outside of the house were observed to have suitable bat roost habitat, namely the eave soffits, eave vents, and plywood boarded windows (Photo 6). Lastly, suitable foliage roost habitat (*e.g.,* dense clusters of leaves) was observed in the form of ornamental trees surrounding the Old Juvenile Justice Center and oak trees along the Oregon Gulch riparian corridor.

However, though suitable bat roost habitat was observed within and on the exterior of the Old Juvenile Justice Center, no bats or signs of bat use (*e.g.,* guano or staining) were observed during the internal or external daytime bat roost surveys. In addition, none of the trees scheduled for removal had suitable crevice roost habitat (e.g., exfoliating bark, dead or rotting stems/branches) and no signs of bat use (e.g., roosting bats, guano, or staining) was observed. Therefore, the Old Juvenile Justice Center and adjacent tree roost habitat scheduled for removal has an overall low potential to support a large number of roosting bats (*e.g.,* maternity colony).

EMERGENCE SURVEY RESULTS

The bat emergence surveys at the Old Juvenile Justice Center were conducted one-half hour before sunset and continued until one and one-half hour after sunset. Surveys were focused on locations where bats could enter and exit suitable bat roost habitat on the exterior of the building (Photo 4 – 6). However, no bats were observed emerging from the during either of the two Old Juvenile Justice Center nighttime emergence surveys.

ACOUSTIC SURVEY RESULTS

Acoustic bat detectors were positioned at the northeast and southwest sides of the Old Juvenile Justice Center near locations bats are likely to enter and exit the building (Figure 1). These locations were chosen to monitor bat activity during both August 23rd and 24th, 2023 bat emergence surveys, to support the determination of the presence or absence of day roosting bats (*e.g.,* maternity roost), and attempt to determine the species exiting the building and using the habitat surrounding the Old Juvenile Justice Center. A total of four bat detector survey locations were used to record a total of 279 bat passes/call sequences over the two nights of acoustic surveys supporting the bat emergence surveys. Species recorded and confirmed acoustically included little brown bat (*Myotis lucifugus*), silver haired bat (*Lasionycteris*

noctivagans), Yuma myotis (*Myotis yumanensis*), Mexican free-tailed bat (*Tadarida brasiliensis*), and California Species of Special Concern western red bat (*Lasiurus blossevillii*).

DISCUSSION AND RECOMMENDATIONS

The Old Juvenile Justice Center has suitable open/cavity and crevice bat roost habitat and has multiple bat access points. In addition, suitable foliage roost habitat was observed in multiple locations surrounding the Old Juvenile Justice Center. However, no maternity roost, juvenile bats, large clusters of bats, bats emerging from the building, or signs of bat use were observed during the August 23rd and 24th, 2023 surveys. In addition, relatively low bat activity was recorded during the two (2) bat emergence surveys and acoustic surveys conducted over the two-night survey period. Therefore, the Old Juvenile Justice Center is unlikely to be currently occupied by bats, unlikely to support a large number of bats, and has an overall low potential to become occupied throughout the year (*e.g.,* migrating bats using the building for day roosting during the fall migration season [September 1 - October 15]). However, if the suitable bat roost habitat is left open and assessable to bats, though unlikely, it is possible the Old Juvenile Justice Center could become occupied by a small number of bats. Rather than establishing a permanent colony, these small groups of bats that could occupy the Old Juvenile Justice Center are likely to use multiple roosts throughout the year and change roost locations within each season (*e.g.,* change day roost locations multiple times during the maternity season [April 15 – August31]). Resulting in the Old Juvenile Justice Center becoming occupied and unoccupied throughout the year on a few occasions. So, based on the results of these surveys, the Old Juvenile Justice Center is currently unoccupied by bats and is unlikely to support a large number of bats during the maternity or winter hibernation seasons. Due to the current unoccupied status and overall low potential for a small number of bats to use the Old Juvenile Justice Center for roosting, demolition of the Old Juvenile Justice Center is unlikely to displace a significant number of bats or significantly reduce the total amount of available bat roost habitat in the project area. Therefore, the demolition of the Old Juvenile Justice Center is not expected to adversely affect the local or regional bat populations.

In addition to the suitable bat roost habitat observed at the Old Juvenile Justice Center, alternate roost habitat was observed adjacent to the Old Juvenile Justice Center in the form of large oaks and other large trees along the Oregon Gulch riparian corridor north of the building, bridges in the project vicinity with suitable bat roost habitat, adjacent residential buildings along Radio Lane, and other County owned facilities such as the Department of Probation and Shasta County Health and Human Services. These structures and tree roost habitats (*e.g.,* crevice and foliage roost habitat) provide similar bat roost habitats to those observed within the Old Juvenile Justice Center and trees scheduled for removal. Though no bats or signs of bat use were observed within or on the exterior of the Old Juvenile Justice Center, due to the presence of suitable bat roost habitat, a small number of bats may occupy the building on occasion throughout the year. However, these alternate roost habitats/locations discussed above should provide adequate replacement bat roost habitat if bats are displaced by the Old Juvenile Justice Center demolition project. Therefore, no compensatory roost habitat is proposed for planned Old Juvenile Justice Center demolition.

4. RECOMMENDATIONS

The recommendations below should be implemented at the Old Juvenile Justice Center. No bats were observed during the daytime roost surveys or during the night emergence surveys. However, bats may switch roosts on a nightly basis, during different seasons throughout the year (*e.g.,* maternity vs. hibernation roosts), and especially during transitional seasons like the spring and fall migration seasons. Therefore, there is still potential of bats roosting within the justice center where suitable habitat was observed.

Due to the observation of suitable bat day roost habitat and suitable entry and exit locations within the Old Juvenile Justice Center, the following bat avoidance measures are recommended.

Recommendations for the Old Juvenile Justice Center include:

- All construction crews should receive environmental training including information regarding local bat species and their general roost ecology.
- If feasible, demolition activities should be conducted outside the maternity season (April 15 – August 31).
- The Shasta County Department of Public Works should inspect and plug soffit access points along the south side of the building, western field, and eastern chicken coop and receiving bay (Figure 1). If needed, a qualified biologist should assist in identifying and plugging entry and exit locations and all other points identified during the Old Juvenile Justice Center surveys. The county should use expanding foam or hardware cloth to plug and remove the potential bat entry and exit locations outside the maternity (April 16 – September 1) and winter hibernation seasons (October 16 – February 28).
- Within two days (48 hours) of the start of work a preconstruction bat roost surveys should be conducted by a qualified biologist. Surveys should include internal and external surveys for roosting bats and inspection of all bat exclusion measures to ensure they are in working order. This survey can be combined with general preconstruction surveys (*e.g.,* nesting bird survey). If bat exclusion measures are determined to be in poor working order, then night emergence surveys should be conducted to determine if bats are currently occupying the Old Juvenile Justice Center.
- If bats are observed, at any time, within the Old Juvenile Justice Center, bats should be allowed to leave on their own. Under the supervision of a qualified bat biologist, one-way bat doors can be used to ensure bats cannot reenter the identified roost. Once bats are confirmed to have left, the roost habitat should be completely sealed so bat cannot reenter. In addition, the roost habitat should be modified to reduce the suitability for roosting bats (e.g., placing fans in the barn increase the airflow and lower the structure daytime and nighttime temperatures). Bat eviction methods (*e.g.,* one-way doors) and roost modifications should only occur outside the bat maternity season (April 15 – August 31).
- If individual nonbreeding and non-special status bats are present, a qualified biologist may be retained to develop a roost protection plan, remove the bats, and work may proceed year-round at

the Old Juvenile Justice Center. If a maternity roost or special status species bat is observed, no work is allowed without first, notifying and consultation with the California Department of Fish and Wildlife, development of a bat protection plan, excluding bats outside of the breeding season, and providing alternate roost site(s).

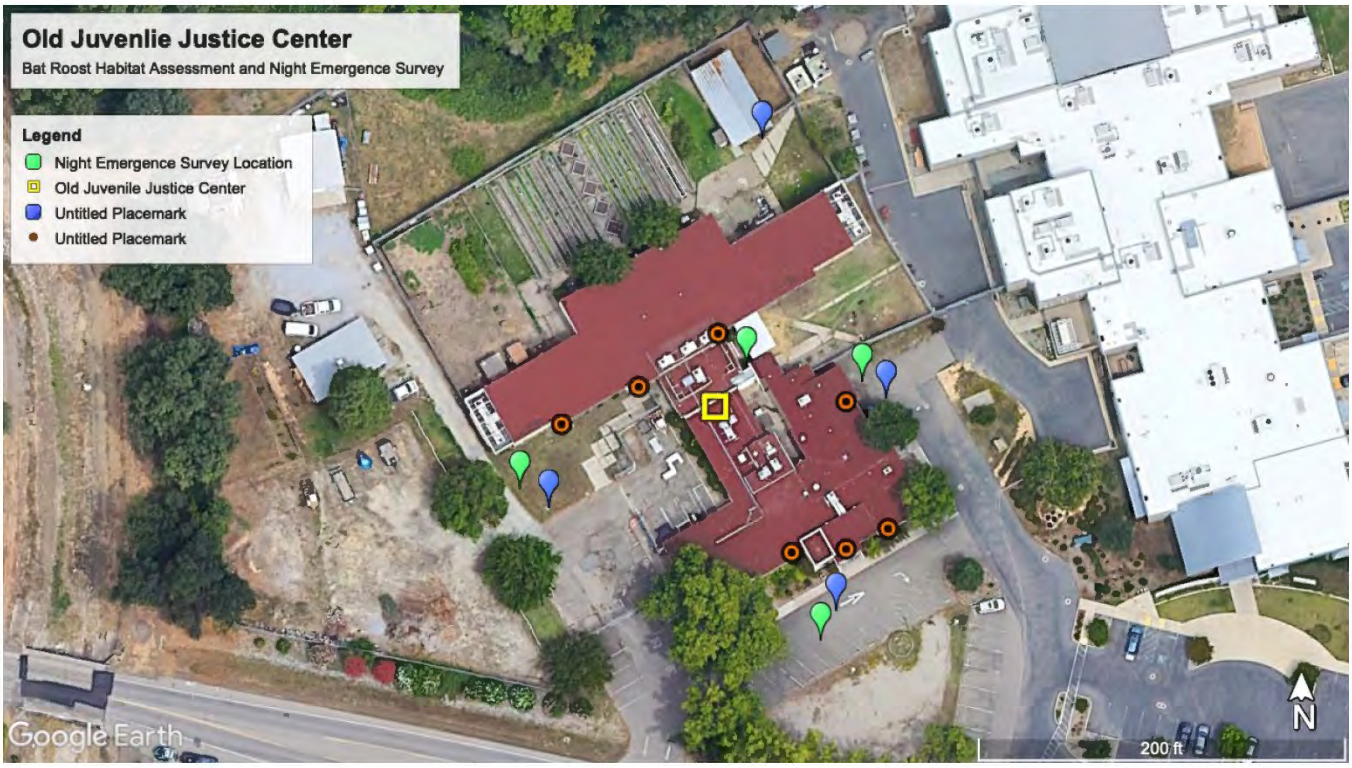


Figure 1: Map of night emergence surveyor locations, bat detector locations, and potential bat entry and exit locations observed during the bat roost habitat assessment and night emergence surveys at the Old Juvenile Justice Center.

Representative site photos from the August 23rd – 24th, 2023 Bat Habitat Assessment and Night Emergence Surveys conducted at the Old Juvenile Justice Center.

Photo 1. Night vision and bat detector set up on the southwestern side of the Old Juvenile Justice Center during the night emergence surveys. Orange arrow indicating the night vision unit used to monitor for emerging bats.

Photo 2. Bat detector set up on the northeastern side of the Old Juvenile Justice Center. Orange arrow indicating the bat detector microphone.

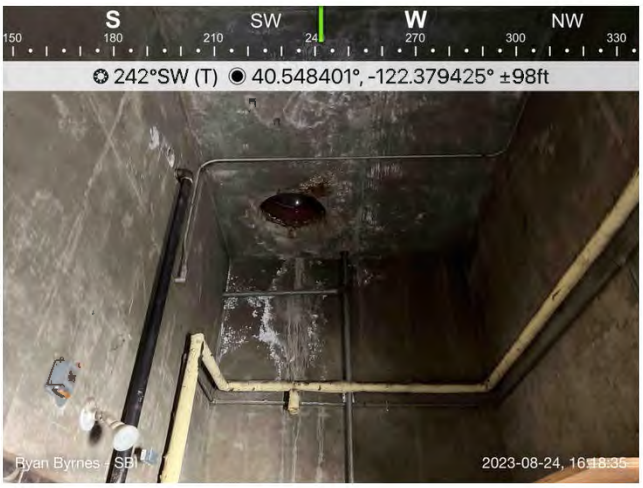


Photo 3. Suitable open roost habitat observed within the electrical room of the Old Juvenile Justice Center. No bats or signs of bat use were observed during the survey.

Photo 4. Orange arrow indicating a bat entry and exit point observed on the west side of the Ole Juvenile Justice Center near the western yard.

Photo 5. Photo of the thermal scope set up during the August 24th emergence survey adjacent to the eastern chicken coop. The orange arrows indicating potential bat entry and exit locations. No bats were observed during the emergence survey.

Photo 6. Photo of the main entrance to the Old Juvenile Justice Center. Orange arrows indicate potential bat entry and exit locations within the building's soffit. No bats or signs of bat use was observed during the surveys.

Attachment D

Cultural Resources Inventory Report

NOTE TO REVIEWER

The *Cultural Resources Inventory for the Shasta County Juvenile Hall Expansion Project on Radio Lane, Shasta County, California* (ENPLAN, 2010) is not available for public distribution. This report identifies the locations of cultural resource sites. Disclosure of this information to the public may be in violation of both federal and State laws. Applicable United States laws include, but may not be limited to, Section 304 of the National Historic Preservation Act (16 U.S.C. 470w-3). In California, such laws include, but may not be limited to, Government Code Section 6254.10. Site location information should be kept confidential and is not for public disclosure.

Additionally, records maintained or in the possession of the Native American Heritage Commission or State and local agencies that are exempt from public disclosure include those that contain information on Native American graves, cemeteries, and sacred places, and include records obtained during consultation with Native Americans (California Government Code Section 6254(r) and Section 6254.10).

Information contained in the above referenced reports related on the specific location of prehistoric and historic sites is confidential and exempt from the Freedom of Information Act (FOIA) and the California Public Records Act (CPRA); therefore, site specific cultural resource investigations are not appended to this Initial Study. Professionally qualified individuals, as determined by the California Office of Historic Preservation, may contact the Shasta County Department of Public Works directly in order to inquire about its availability.

Attachment E

Historic Resource Evaluation Report

FINAL

HISTORICAL RESOURCE EVALUATION
OF
OLD SHASTA COUNTY JUVENILE JUSTICE CENTER
2680 RADIO LANE,
REDDING, SHASTA COUNTY, CALIFORNIA
APN: 048-140-007-000

Prepared for:
Shasta County Department of Probation
2684 Radio Lane
Redding, CA 96001

Prepared by:
Pamela Daly, M.S., Principal Architectural Historian
Daly & Associates
951 East Beacon Drive, Eugene, OR 97404
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August 2023

EXECUTIVE SUMMARY

Proposed Undertaking: The proposed project (Project) will be conducted within a 63.65 acre legal parcel owned by Shasta County (APN 048-140-007-00). The parcel is bound by Breslauer Way to the north, Radio Lane to the south, Eastside Road to the west, and the Sacramento River to the east. Shasta County has a variety of facilities located within the parcel. The Old Shasta County Juvenile Justice Center (SCJJC) is located within the parcel and has a street address of 2680 Radio Lane. The proposed Project calls for the demolition of the Old SCJJC building, as it has been abandoned since the construction of transfer of operations to the New SCJJC building, located immediately to the west at 2684 Radio Lane.

Purpose and Scope of the Survey: Daly & Associates was retained to conduct a survey of the Old SCJJC building situated at 2680 Radio Lane, and provide a historic evaluation for said building. The resulting report develops the historic context and statement of significance for the Old SCJJC located in the City of Redding, Shasta County, California. The Project falls under the regulatory authority of the California Environmental Quality Act (CEQA).

Summary of Investigation: An intensive-level field survey was made of the Old SCJJC building by Architectural Historian Pamela Daly, M.S., on July 24, 2023. The fieldwork consisted of performing a physical inspection of the Old SCJJC building and observing the overall interrelationship of the structure and surrounding landscape to determine if there is evidence of the subject building being a significant historic resource.

Summary of Findings: Our investigation revealed that the Old SCJJC was designed by the San Francisco architect E. Geoff Bangs in a utilitarian version of Ranch style architecture, constructed in 1957 to be used as a juvenile detention facility to replace the aging Ross Cottage compound.

Juvenile detention and justice centers (sometimes known as reform schools) had been established across the United States since the 1890s. There is no evidence that the Old SCJJC is a rare or important example of a juvenile center, and its design was not unique among the many other juvenile detention complexes in other California counties. The Old SCJJC was constructed to replace the aging and inefficient Ross Cottage in order to meet the health, safety, and educational needs of juveniles in the County's care in 1957, and has been enlarged and altered since its construction. While the OLD SCJJC building at 2680 Radio Lane does not appear to have met the criteria to be determined a historic property for listing in the California Register of Historical Resources (CRHR), it has maintained sufficient levels of physical integrity for its history to be evaluated for significance.

Disposition of Data: Copies of this report will be filed with Shasta County and the Northwest Information Center at California State University, Sonoma. Original documentation will remain on file at Daly & Associates, Eugene, Oregon.

TABLE OF CONTENTS

LIST OF APPENDICES

1.0 INTRODUCTION

This report provides a historic evaluation, and develops the historic context of a built-environment resource located at 2680 Radio Lane, in the City of Redding, Shasta County, California (Figure 1). The subject building is situated within a large 65+-acre parcel owned by Shasta County, identified as Shasta County Assessor Parcel Number (APN) 048-140-007-00. The Area-of-Potential-Effect (APE) for this project is limited to the Old SCJJC building and its immediate surroundings within the legal parcel.

The proposed project (Project) calls for the demolition of the Old SCJJC building, as it has been replaced in recent years by the construction of the New SCJJC building located just to the east of the Old SCJJC building at 2684 Radio Lane. The Project will only affect the Old SCJJC building and its immediate surroundings within the APE.

The APE is located to the south of the city center of Redding, and accessed from Radio Lane. Figures 1 and 2 present the location of the APE in Section 36 of Township 31 North, Range 5 East, on the Redding 1969 USGS 7.5-minute topographic map (Mount Diablo Base and Meridian). A current aerial view of the APE and the Old SCJJC Project area is presented in Figure 3.

This study was conducted in order to identify any potentially significant built-environment resources over 50 years of age that may be adversely affected by the proposed Project. The evaluation of the built-environment resource in the Project area was conducted by Pamela Daly, M.S., a qualified Architectural Historian. Contained within this report is the baseline data used to determine if the Old SCJJC building has the potential to be considered for inclusion in the California Register of Historical Resources (CRHR) as the Project falls under the regulatory authority of the California Environmental Quality Act (CEQA).

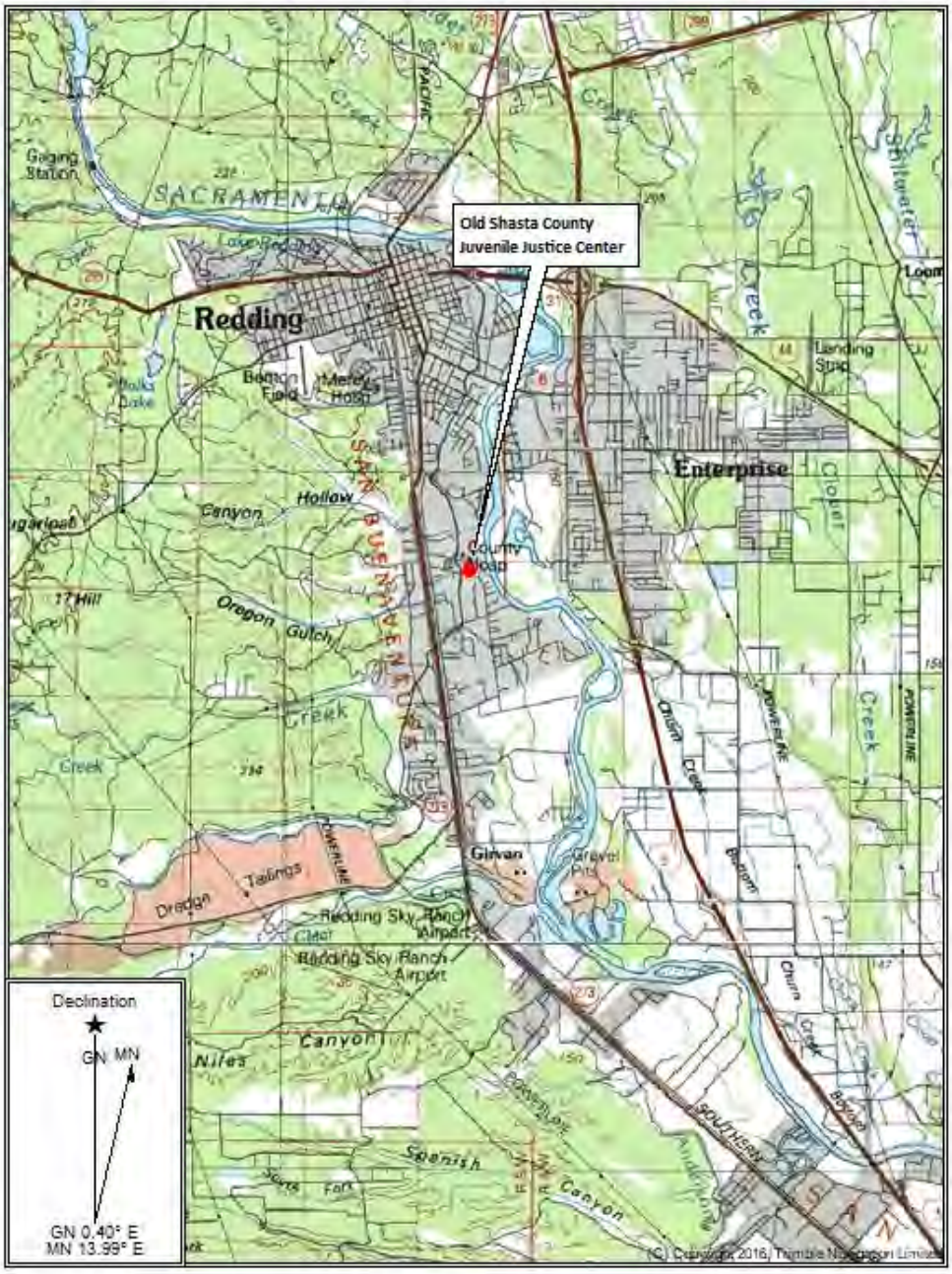
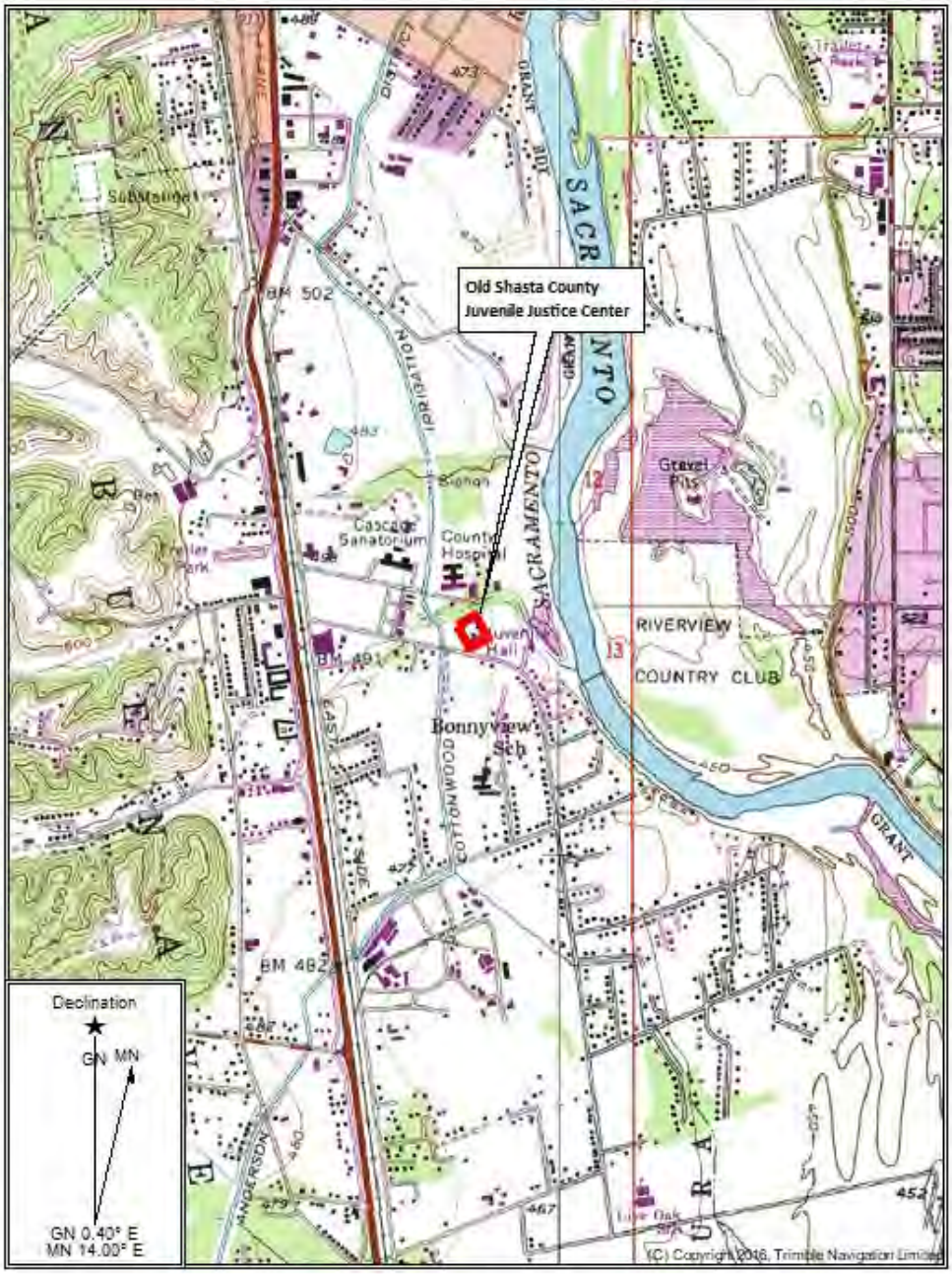


Figure 1: Project Vicinity
Old Shasta County Juvenile Justice Center
Redding, CA



SCALE 1:24000

0 1000 2000 3000 4000

Feet

Figure 2: Project Location
Old Shasta County Juvenile Justice Center
2680 Radio Lane, Redding, CA

SCALE 1:1200

0 100 200

Feet

Figure 3: Aerial View
Old Juvenile Justice Center
2680 Radio Lane, Redding
Shasta County, CA

1.1 Report Organization

Chapter 1.0 of this report, Introduction, provides an overview of this project and its scope, and presents the legislative requirements that mandate the report's preparation. Chapter 2.0, Methods, details the methods used to inventory the built-environment resource located within the proposed Project area, including a discussion of the CRHR criteria. Chapter 3.0, Historic Context, provides a short history of the subject property and the surrounding area. Chapter 4.0 presents a physical description of the built-environment resource located within the proposed Project area. Chapter 5.0 presents the recommendations for CRHR eligibility, and Chapter 6.0, Bibliography and References, presents the cited works and other materials used in the preparation of this report. Appendix A presents the qualifications of the person performing the evaluation of the subject property, and Appendix B contains the California Department of Parks and Recreation series 523 (DPR 523) property inventory forms for the subject of this report.

1.2 Previous Historic Property Investigations within the Area of Potential Effects

In 2010, Shasta County retained the services of ENPLAN to conduct a cultural resources evaluation of the proposed site for the future Shasta County Juvenile Justice Center, to be located immediately to the east of the existing Juvenile Justice Center. The extant Juvenile Justice Center was not evaluated for historical significance in that report.

1.3 Data Collection

The Northwest Information Center (NWIC) is a branch of the California Historic Resources Information System (CHRIS), established by the Office of Historic Preservation (OHP), and maintains information concerning cultural resources and associated studies recorded in their respective counties. The BERD is maintained by the CHRIS, and it was searched for any historical studies performed at the property at 2680 Radio Lane in Redding, Shasta County.

Historic maps accessed for this study include:

- Bureau of Land Management, General Land Office surveys
- 1946 USGS Redding, CA 1:62,000
- 1957 USGS Redding, CA 1:24,000
- 1969 USGS Redding, CA 1:24,000

2.0 METHODS

The current survey of the built-environment resources in the Project area included conducting archival research, internet research, and a pedestrian-level inspection of the proposed Project area. These data were used to prepare the descriptions of the built-environment resource within the Project area, and prepare a contextual statement and site-specific history for the property. This will provide sufficient baseline data to formulate conclusions about whether the built-environment resource located in the Project area would, or would not meet the criteria for inclusion in the CRHR.

2.1 CRHR Criteria for Historical Resource Evaluation

The Office of Historic Preservation, as an office of the California Department of Parks and Recreation, implements the policies of the duties as set forth in the Public Resources Code (PRC) and maintains the

CHRIS. The State Historic Preservation Officer (SHPO) is an appointed official who implements historic preservation programs within the state's jurisdictions.

2.1.a California Register of Historical Resources

Created by Assembly Bill 2881, which was signed into law on September 27, 1992, the CRHR is "an authoritative listing and guide to be used by state and local agencies, private groups, and citizens in identifying the existing historical resources of the state and to indicate which resources deserve to be protected, to the extent prudent and feasible, from substantial adverse change."[1] The criteria for eligibility for the CRHR are based upon the criteria for listing a property in the NRHP.[2] Certain resources are determined by the statute to be automatically included in the CRHR, including California properties formally determined eligible for, or listed in, the NRHP.[3]

The CRHP consists of resources that are listed automatically and those that must be nominated through an application and public hearing process. The CRHP automatically includes the following:

- California properties listed in the NRHP and those formally determined eligible for the NRHP;
- California Registered Historical Landmarks from No. 770 onward;
- Those California Points of Historical Interest that have been evaluated by the OHP and have been recommended to the State Historical Resources Commission for inclusion in the CRHR.[4]

Other resources which may be nominated to the CRHR include:

- Individual historical resources;
- Historical resources contributing to historic districts;
- Historical resources identified as significant in historical resources surveys with significance ratings of Category 1 through 5;
- Historical resources designated or listed as local landmarks, or designated under any local ordinance, such as a historic preservation overlay zone.[5]

To be eligible for listing in the CRHR, a historic resource must be significant at the local, state, or national level under one or more of the following four 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; or
D. Has yielded, or may be likely to yield, information important in prehistory or history.

Additionally, a historic resource eligible for listing in the CRHR must meet one or more of the criteria of significance described above and retain enough of its historic character or appearance to be

[1] California Public Resources Code § 5024.1(a).
[2] California Public Resources Code § 5024.1(b).
[3] California Public Resources Code § 5024.1(d).
[4] California Public Resources Code § 5024.1(d).
[5] California Public Resources Code § 5024.1(e).

recognizable as a historical resource and to convey the reasons for its significance. Historical resources that have been rehabilitated or restored may be evaluated for listing.[6]

Integrity under the CRHR is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association. The resource must also be judged with reference to the particular criteria under which it is proposed for eligibility.[7]

The seven factors that define integrity are location, design, setting, materials, workmanship, feeling, and association. The following is excerpted from National Register of Historic Places (NRHP) Bulletin #15, *How to Apply the National Register Criteria for Evaluation*, which provides guidance on the interpretation and application of these factors.

- Location is the place where the historic property was constructed or the place where the historic event occurred.
- Design is the combination of elements that create the form, plan, space, structure, and style of the property.
- Setting is the physical environment of a historic property.
- Materials are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property.
- Workmanship is the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory.
- Feeling is property's expression of the aesthetic or historic sense of a particular period of time.
- Association is the direct link between an important historic event or person and a historic property.

In assessing a property's integrity, the NRHP criteria recognize that properties change over time; therefore, it is not necessary for a property to retain all its historic physical features or characteristics. The property must, however, retain the essential physical features that enable it to convey its historic identity.

2.1.b. California Office of Historical Preservation Survey Methodology

The evaluation instructions and classification system prescribed by the California OHP in its *Instructions for Recording Historical Resources* provide a three-digit evaluation rating code for use in classifying potential historic resources. The first digit indicates one of the following general evaluation categories for use in conducting cultural resources surveys:

1. Listed in the NRHP or the CRHR;
2. Determined eligible for listing in the NRHP or the CRHR;
3. Appears eligible for listing in the NRHP or the CRHR through survey evaluation;
4. Appears eligible for listing in the NRHP or the CRHR through other evaluation;
5. Recognized as Historically Significant by Local Government;
6. Not eligible for any Listing or Designation; or
7. Not evaluated for the NRHP or CRHR, or needs re-evaluation.

[6] California Code of Regulations, California Register of Historical Resources (Title 14, Chapter11.5), Section 4852(c).
[7] Ibid.

The second digit of the evaluation status code is a letter code indicating whether the resource is separately eligible (S), eligible as part of a district (D), or both (B). The third digit is a number that is used to further specify significance and refine the relationship of the property to the NRHP and/or CRHR. Under this evaluation system, categories 1 through 4 pertain to various levels of NRHP eligibility. The CRHR, however, may include surveyed resources with evaluation rating codes through level 5. In addition, properties found ineligible for listing in the NRHP, CRHR, or for designation under a local ordinance are given an evaluation status code of 6.

2.3 Historical Research

The evaluation of the Old SCJJC building located in the APE involved a review of the history of Shasta County and the City of Redding area. Research was performed using the California Digital Newspaper Collection, archival issues of the *Redding Record Searchlight*, and the American Institute of Architects Historical Directories. Internet/on-line resources included accessing historic maps and surveys, historic aerial photographs, historic newspapers, and genealogical information retrieved for persons associated with the subject property.

2.4 On-Site Evaluation Process

An intensive-level field survey of the Old SCJJC building was conducted on July 24, 2023 by Architectural Historian Pamela Daly, M.S. The fieldwork consisted of inspecting the building and its overall interrelationship with the surrounding landscape that is located within the APE.

The evaluation by Daly & Associates examined the built-environment resource in the context of its surrounding landscape, noting the condition of the existing structure, construction materials, function, and any noteworthy physical elements of the resource. The field survey also included obtaining color digital photos of the structure, elevations, and landscape. This information was used to create baseline data to determine the potential eligibility of the subject property as a historic resource.

3.0 HISTORIC CONTEXT

3.1 City of Redding and Shasta County

The City of Redding is located within the Rancho Buenaventura lands granted to Pierson B. Reading and partners in August 1844 by Alta California Governor Micheltorena. During the Gold Rush, the area became used for raising and grazing cattle as it was mostly too hilly to be used for growing grains and hay. Settlements were located along the Sacramento River, which had become a major transportation route for moving goods and passengers between Oakland, Sacramento, Shasta City, and the Trinity gold mines.

The Central Pacific Railroad/Southern Pacific Railroad started building a railroad line north in 1869 from its hub just south of Sacramento, along the western side of the Sacramento River. The town of Redding was named after Benjamin B. Redding of Sacramento.[8] Redding had originally been a printer and journalist in Sacramento, obtaining the position of owner-editor of *The State Journal* in partnership with

[8] *Mariposa Gazette*. "Pacific Coast". Number 51, July 5, 1872.

James McClatchy in the early 1850s. He would become mayor of the City of Sacramento in 1856 and go on to serve in the California Legislature, become Secretary of State, and act as a land agent for the Central Pacific Railroad.[9]

The Mariposa Gazette declared in July of 1872 that a "new railroad town near Shasta is named in honor of B .B. Redding of Sacramento".[10] Within 10 years, the Central Pacific Railroad would continue building their line northward, and Redding would become a shipping junction for the lumber and mining industries located in the region to connect with the Sacramento River, or points south. The line passed through Red Bluff, Anderson, Cottonwood, ending (for 10 years) at Redding.

The City of Redding was incorporated in 1887, and the mining and refining of various metals, quarrying of stone, lumber processing, and livestock grazing were the main commercial venues in the county. Situated in the most northern area of the Sacramento Valley, dry farming methods were used for growing hay and grains, and some fruit groves (particularly plums) were planted on land along the Sacramento River before the construction of canal systems extending from the river allowed for farming farther from the river.

Shasta County and the City of Redding benefited from the construction of the Shasta Dam and related flood control systems when work began in 1937. Workers and their families inundated the area during the years of the Great Depression, and settled there as work continued on the dam until its completion in 1944. The Trinity River Project and the construction of the Whiskeytown Dam provided needed jobs in the 1960s after the demise of the local mining industry. The two dams and their associated lakes created a recreation-related industry for the City of Redding that has economically supported the community into the twenty-first century.

3.2 Old Shasta County Juvenile Justice Center

In the 1890s, reformers working at Jane Addams' Hull House in Chicago made the care and treatment of vulnerable children in the criminal justice system a priority issue to be investigated and improved.[11] The concept of a "parental court" was conceived to divert children away from the adult system and give them a better shot at maturing into upstanding citizens.[12] The Illinois legislature passed a bill in the spring of 1899 creating the world's first juvenile justice system, with the first cases heard at the Cook County Building in downtown Chicago.[13] Unlike in the adult system, the procedures of the first juvenile court were intentionally designed to be informal in the hopes that the deliberations would be more restorative than punitive. "The progressive reformers hoped this approach would allow judges and probation officers to provide individual solutions in each child's case, and increase their chances of success".[14]

Prior to the construction of the Old SCJJC in 1957, both male and female delinquent, and youthful offenders, of Shasta County were housed in Ross Cottage, the County's juvenile detention home, or in

[9] *Marysville Daily Herald*, March 26, 1856.
[10] *Mariposa Gazette*. "Pacific Coast". Number 51, July 5, 1872.
[11] Myers, Quinn. "How Chicago Women Created the World's First Juvenile Justice System". Produced by WBEZ Chicago. Accessed August 8, 2023. https://www.npr.org/local/309/2019/05/13/722351881/how-chicago-women-created-the-world-s-first-juvenile-justice-system
[12] Ibid.
[13] Ibid.
[14] Ibid.

isolated cells within the Redding City jail.[15] Based upon building plans for Ross Cottage, built in 1942, "Shasta's county's home, which can house up to 16 juveniles, takes cases crated by reason of misconduct on the part of the juveniles, and those who may not be delinquent themselves but whose parents are found unfit."[16] Ross Cottage was built upon the location of "the old Bechelli night club property" in Enterprise, and had been named after Judge Albert F. Ross.[17] Those juveniles taken from an unfit home would be quickly transitioned from Ross Cottage to a "widespread foster home program" since they did not need to be confined.[18] Occasionally, Trinity and Tehama Counties would board their delinquents at Ross Cottage since they didn't have a facility for juveniles.[19]

As the population growth in Shasta County continued to increase after 1942, and the boom and bust periods of the building of the dams and logging industry caused increases in the number of families affected by societal pressures, Shasta County found themselves needing to build a juvenile facility to house adolescents charged with serious crimes. Ross Cottage was trying to act as an orphanage for children needing safe and secure housing, at the same time as being a detention center for children who needed to be detained for the safety of the community. Additionally, in January, 1953, a Shasta County grand jury found that the living conditions at Ross Cottage were unacceptably dangerous (especially for fire), and called for the building to be replaced.[20]

The San Francisco architect, Edward Geoffrey Bangs, had designed the new Shasta County courthouse (1500 Court Street), a wing on the County Hospital, and Cascade Sanatorium for Shasta County after World War II. E. Geoffrey Bangs specialized in designing public buildings, and he had "built four such [juvenile detention] homes in other counties and is now building a fifth" home for another municipality.[21] After a contentious meeting of the Shasta County Supervisors in June 1956, E. Geoffrey Bangs was retained to design the new juvenile detention facility, with construction to begin in 1957.[22]

Shasta County awarded the project of constructing the new juvenile center to Singleton Construction Company of Eureka, California, with manager Jack McCall directing the project.[23] The price for the new building at the start of construction was $153,200.

[15] Fader, Bill. "Over-Crowding of Cells Poses Problem for Chief". *Record Searchlight*, April 30, 1955. Page 9.
[16] *Record Searchlight*. "Two New Members Named For Juvenile Committee", March 24, 1952. Page 2.
[17] *Record Searchlight*. "People Invited to 'Open House' at Ross Cottage", November 15, 1945. Page 1.
[18] *Record Searchlight*. "Two New Members Named For Juvenile Committee", March 24, 1952. Page 2.
[19] Ibid.
[20] *Record Searchlight.* "Courthouse Called 'Disgrace to County' in Jury Report", January 6, 1953. Page 1.
[21] *Record Searchlig*ht. "Supervisors to Receive Detention Home Sketch", April 3, 1956. Page 7.
[22] *Record Searchlight*. "Bangs Hit Back at Wilsey Attack", June 27, 1956. Page 1.
[23] *Record Searchlight*. "Home for Juveniles", June 1, 1957. Page 11.

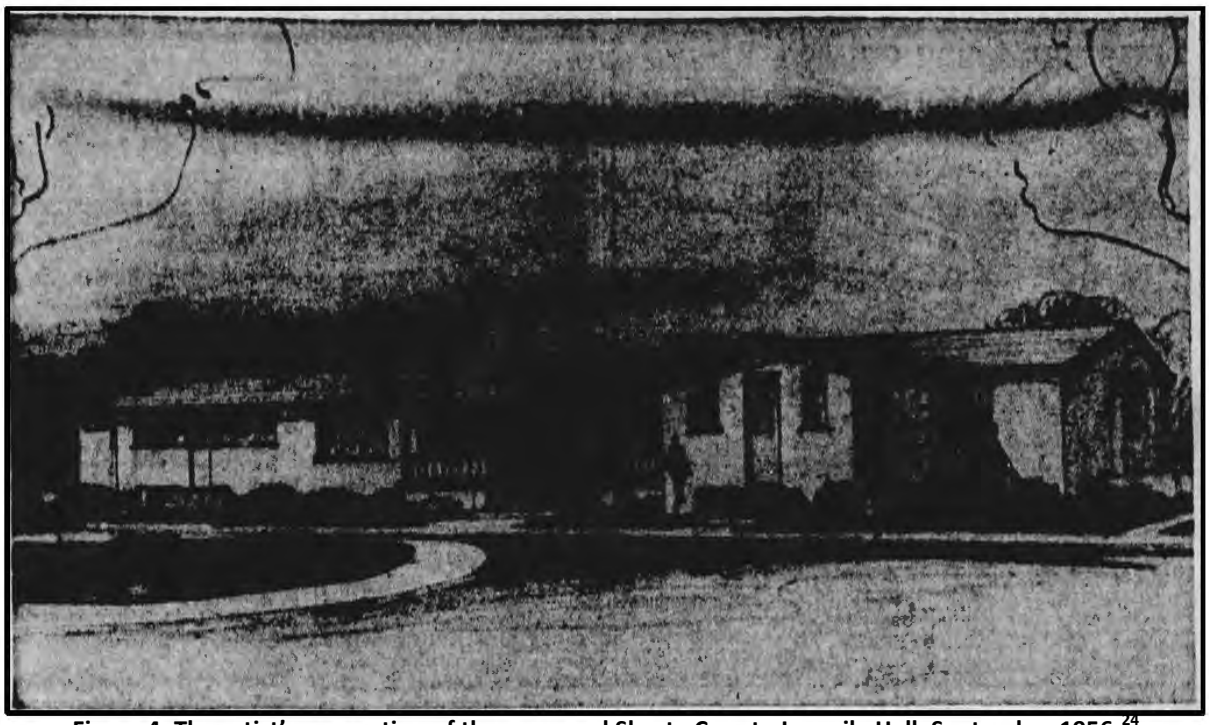


Figure 4: The artist's conception of the proposed Shasta County Juvenile Hall, September 1956.[24]

4.0 HISTORIC STRUCTURES EVALUATION

The subject building is located within the approximate 65+-acre Assessor Parcel Number 048-140-007-000, owned by Shasta County. The Old SCJJC building is situated in the eastern half of the parcel, which is bound on the north by Breslauer Way, on the south by Radio Lane, on the west by the Sacramento River, and on the east by Eastside Road. The Old SCJJC has the address of 2680 Radio Lane, and is accessed from a driveway on the north side of Radio Lane.

The Old SCJJC is a one-story building that was originally designed for Shasta County by Edward Geoff Bangs in 1956. E. Geoffrey Bangs was a Bay Area architect and a graduate of University of California, Berkeley. He earned cum laude degree in Architecture in 1914 and obtained his master's the following year. After graduation he went to work for the architect John Galen Howard.[25] (J.G. Howard was the supervising architect for the design of the University of California, Berkeley from 1901-1922, as well as the founder and Director of its School of Architecture from 1903 to 1926.)[26]

His work with Howard was interrupted by World War I, where he served with the American Expedition Forces from 1917 to 1919. Upon returning to the U.S. he struck out on his own, while still maintain a working relationship with Howard. Bangs designed many public buildings and large-scale public housing projects in Northern California. His projects included UC Berkeley's Lewis Hall, the Contra Costa Hall of

[24] *Record Searchlight*. "New Juvenile Hall", September 25, 1956. Page 7.
[25] American Institute of Architects, "American Architects Directory, 1956". Accessed: August 14, 2023. https://content.aia.org/sites/default/files/2018-09/Bowker_1956_B.pdf
[26] "John Galen Howard". University of California, Berkeley College of Environmental Design. Accessed: August 15, 2023. https://ced.berkeley.edu/collections/howard-john-galen

Records, and the Shasta County Sanatorium, Shasta County Hospital, and courthouses for Shasta and Butte counties.[27]

In 1956, an "artist's concept" of the proposed new juvenile hall for Shasta County was printed in the *Record Searchlight* (Figure 4).[28] The new, one-story facility was described as being "residential in character" with a wood-frame front porch accenting the stucco clad building. The dormitories for girls, boys, and infants would be located to the right and left of the entrance porch, with the front hall made to look residential in appearance.[29]

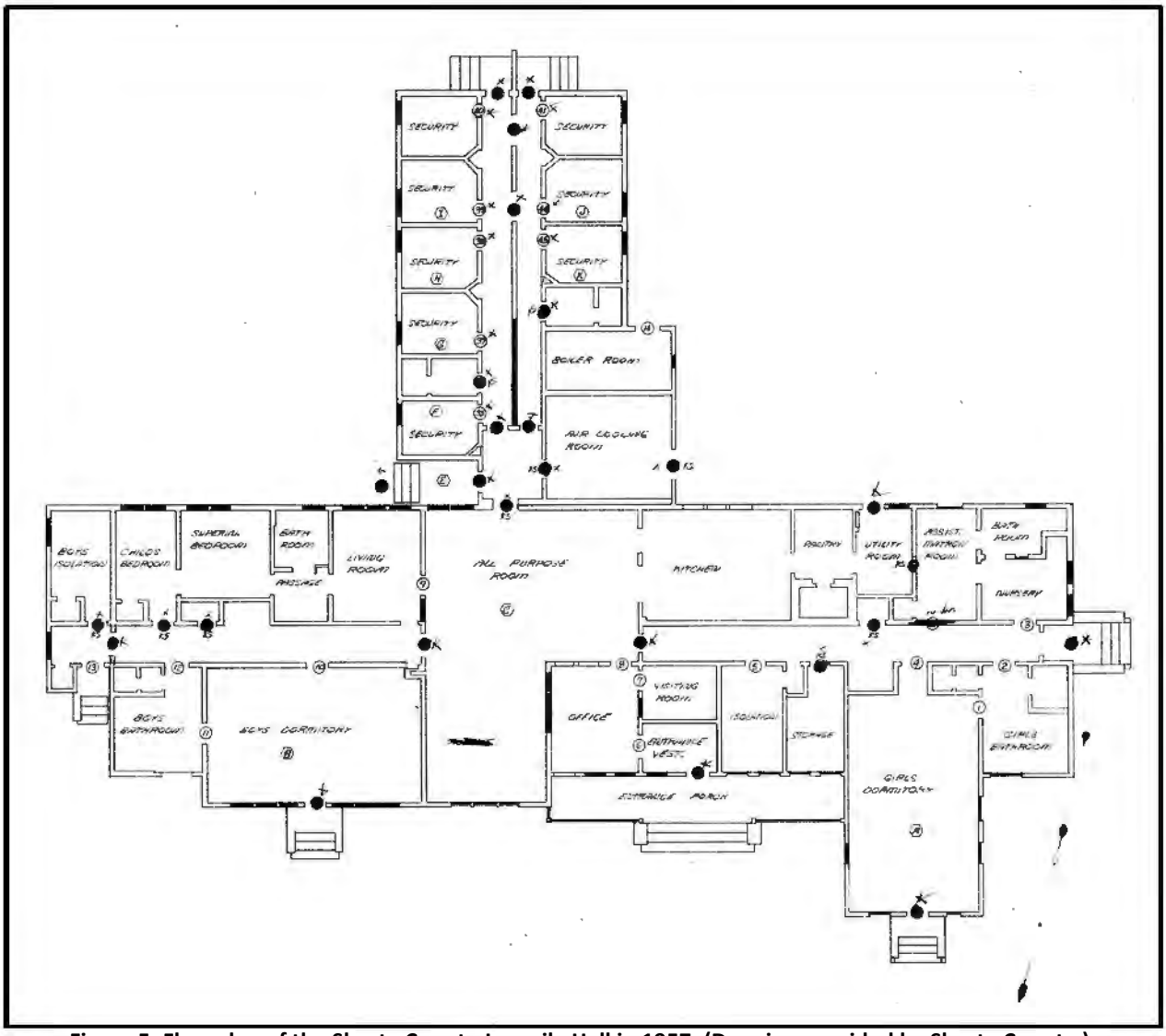


Figure 5: Floorplan of the Shasta County Juvenile Hall in 1957. (Drawing provided by Shasta County.)

The building was laid out in an upside down "T" formation, with the administrative, dorm rooms, dining area, and all purpose room situated in the horizontal block of the "T", while the vertical block of the

[27] *Record Searchlight*. "Supervisors to Receive Detention Home Sketch", April 3, 1956. Page 7.
[28] *Record Searchlight*. "New Juvenile Hall". September 25, 1956. Page 7.
[29] *Record Searchlight*. "Supervisors Approve Plans For New Juvenile Home", September 25, 1956. Page 7.

building held the "security wing" of the facility (Figure 5). Based upon the architectural drawing of the garage constructed contemporaneously with the Juvenile Hall building, it appears the complex was designed using a modest, California Ranch style of architecture. The design was most probably used to intentionally to make the building appear non-threatening, and give the impression that it was a simple ranch home in the country. The building had a cross-gable roof system comprised of a medium-pitch roof clad with thick butt shingles tinted to match the natural wood trim of the doors and windows (Figure 6).

Except for the security wing, the walls and roof framing were constructed of wood members, and the doors and windows appear to have been wood frame as well. The secure wing was constructed along general designs used in locked, detention facilities, with special attention paid to fire safety of detainees. There are eight individual cells constructed of concrete floors, walls, and ceilings, with metal locking doors. The main building sits on a poured concrete foundation. The horizontal block of the building originally measured approximately 125 feet long, and 42 feet wide. The vertical block (security wing) measures approximately 55 feet long and 35 feet wide.

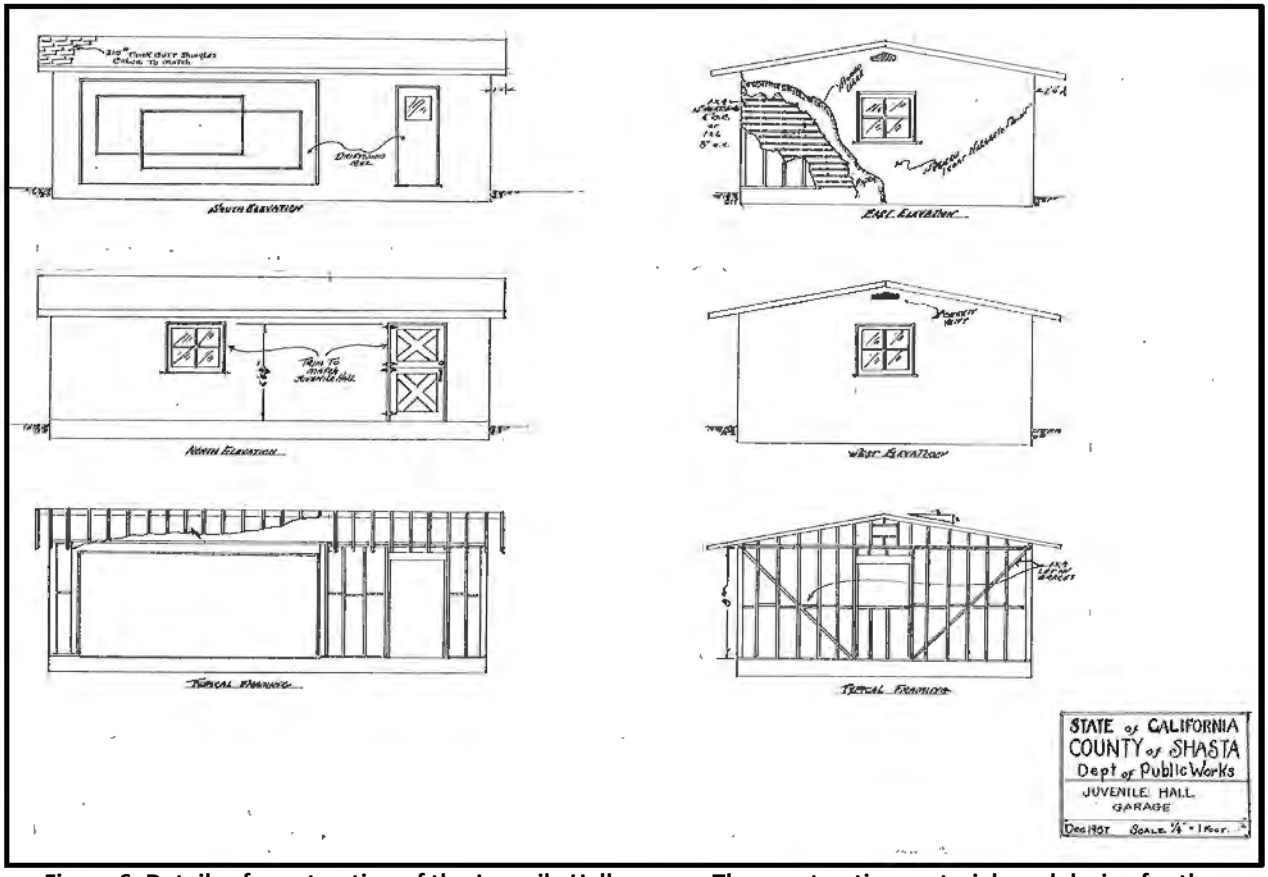


Figure 6: Details of construction of the Juvenile Hall garage. The construction materials and design for the garage would have mirrored that used for the main building – except for the security wing. (Drawing provided by Shasta County.)

Over the course of 60+ years of occupation, the original building was extensively modified with additions, and alterations to both the interior and exterior spaces. The interior of the horizontal block was altered to provide educational space, juvenile court activities, and other program related to supporting the residents of the facility. The exterior was altered with the removal of all the original windows and doors, new stucco cladding, and additions along the east elevation of the security wing. A major addition to the north elevation of the security wing was made in 1992, turning the entire facility into an "I" plan building (Figure 7). Shasta County constructed a new, up-to-date, juvenile detention facility in 2012-2013, just to the east of the subject building, to replace the aging and no-longer efficient facility.

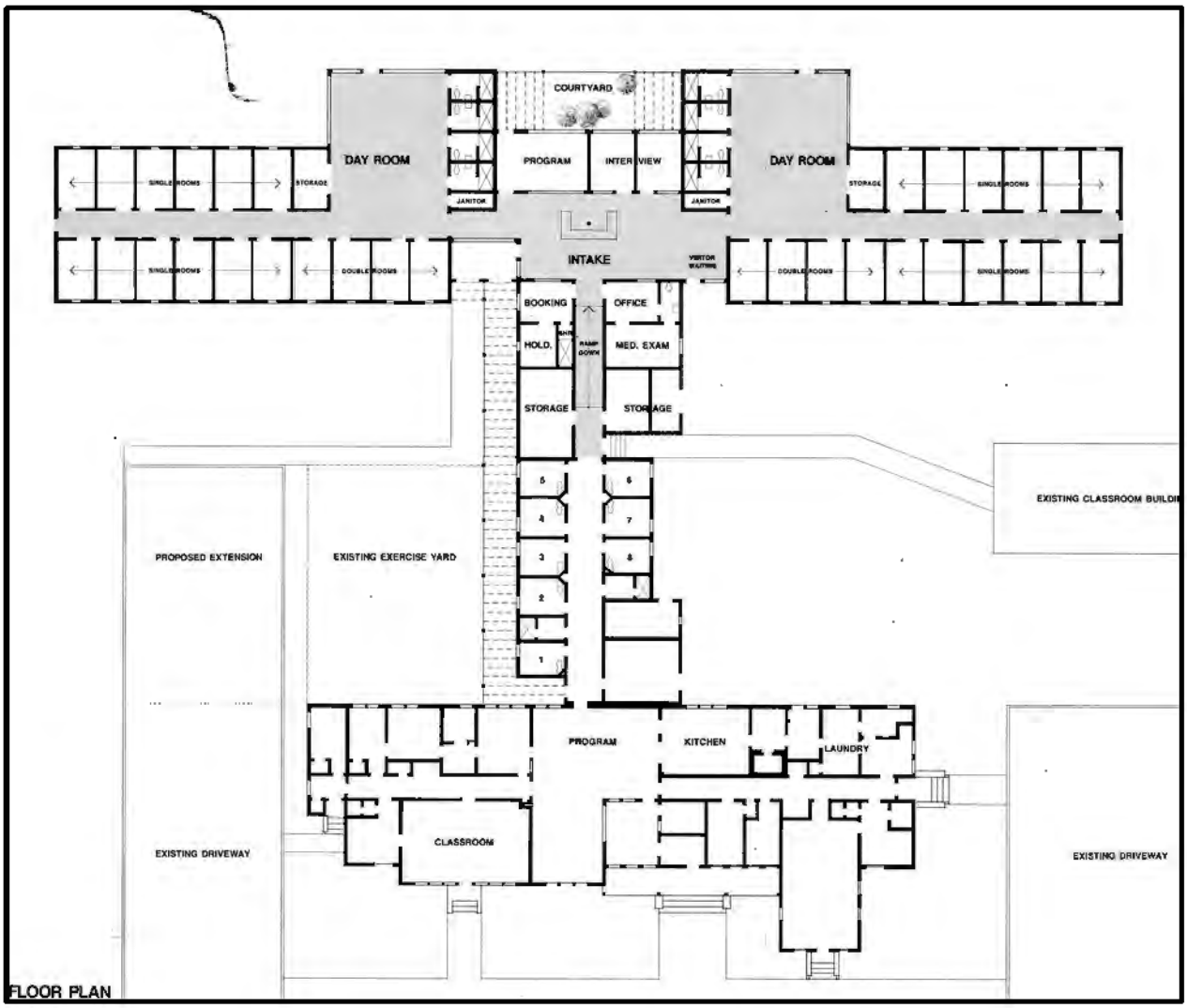


Figure 7: the Old Shasta County Juvenile Justice Center circa 1992. (Drawing provided by Shasta County.)

Figure 8: Front (south) elevation of OLD SCJJC. View looking north.

Figure 9: East elevation of OLD SCJJC. View looking west.

Figure 10: West elevation of the original main block, with the west elevation of the security wing on the left. View looking east.

Figure 11: South elevation of the 1990 addition to Old SCJJC. View looking north.

Figure 12: North elevation of the 1990 wing of the Old SCJJC. The individual bunkrooms span to the east and west from the large day room of the wing (projecting room with canted roof slope). View looking southwest.

5.0 ELIGIBILITY DETERMINATION AND RECOMMENDATION

5.1 Overview

The main objective of this study is to provide an evaluation of significance and eligibility recommendations for the historic-era resource that has not been previously evaluated. The baseline level of documentation provided in this report presents the information necessary to make such an evaluation for the Old SCJJC building located at 2680 Radio Lane. Once the recommendations of eligibility are made, future management considerations for the resources can be determined.

Pursuant to California Public Resources Code §5024.1(a), it is required that state and local agencies perform an evaluation of historic buildings, structures, objects, features, or landscapes located within a proposed project area which have not been previously evaluated for CRHR eligibility in any prior survey.

As part of this current assessment report, the previously unevaluated building was evaluated under CRHR criteria to determine the eligibility of the building as significant resource on a state level (see Section 2.0, Methods). Based on the CRHR criteria, the building was then evaluated for its possession of historic integrity: location, design, setting, materials, workmanship, feeling and association, within its historic context.

The assessment of the significance of a property within its historic context is based on OHP guidelines:

- Identify the historic context represented by the property.
- Determine how the theme of context is significant in local, state, or national history.
- Determine if the property type represents the context.
- Determine how the property illustrates an important aspect of the history.
- Determine if the property retains the physical features necessary to convey its significance (historic integrity).

5.2 CRHR Eligibility Recommendations

Criterion 1: The Old SCJJC building at 2680 Radio Lane has not been found to be directly associated with important themes or aspects regarding the history of juvenile justice in Shasta County or California between 1957 and 1972. The juvenile detention center, and later alterations to become a juvenile justice center as well, is just one of many located in California. The Shasta County facility was not discovered to have been an outstanding example of a juvenile detention facility, nor was the facility the site of where important advances in the detention and rehabilitation of juveniles were created and promoted. We could find no evidence that the Old SCJJC was associated with any important themes with the administration of juvenile facilities in Shasta County or California. The property is not eligible for listing in the CRHR under Criterion 1.

Criterion 2: The Old SCJJC building at 2680 Radio Lane has not been found to be directly associated with any important persons or groups in the field of juvenile justice or confinement of juvenile offenders in Shasta County or California. The property is not eligible for listing in the CRHR under Criterion 2.

Criterion 3: The Old SCJJC building at 2680 Radio Lane was designed by the architect E. Geoff Bangs in 1956, and constructed by Singleton Construction Company of Eureka, California in 1957 to replace the aging and inadequate Ross Cottage facility that had served the county since 1942. Shasta County was able to provide for this study, architectural drawings of the evolution of the Old SCJJC, to allow an

accurate examination of the changes and alterations of the building that have occurred since its construction. The Old SCJJC building was designed using a modest, California Ranch style of architecture applied to the "T" plan building of intersecting rectangular masses. The original wood windows, doors, and trim that are considered contributing characteristics to the Ranch style of architecture were removed from the Old SCJJC when it was extensively remodeled and enlarged in 1990. The building has lost the physical integrity aspects of design, materials, workmanship, feeling, and association, and does not meet the standards to be considered a significant historical resource for listing in the CRHR under Criterion 3.

Criterion 4: It does not appear that the Old SCJJC at 2680 Radio Lane has the capacity to yield information important in the history of the California or Shasta County.

The Old SCJJC has lost substantial aspects of its physical integrity, and lacks the ability to convey its history through the loss of its original design, materials, workmanship, feeling, and association with a juvenile detention center of the 1950s. Aspects of integrity are used to determine if a property can convey a specific historical theme or period of architectural history important on a local, regional, or state level.

The Old SCJJC building at 2680 Radio Lane will be assigned the California Historical Resource Status Code of 6Z for being ineligible for listing in the CRHR as local historical resource.

The main objective of the assessment of the Old SCJJC building is to provide an evaluation of significance and CRHR eligibility recommendation for the built-environment resource found within the study area. The baseline level of documentation provided in this report presents the information necessary to make such an evaluation. Once the recommendation of eligibility is made, future management considerations for the subject property can be determined.

5.3 Mitigation Measures

No mitigation measures are required to be performed prior to the demolition of the built-environment resource known as the Old SCJJC located at 2680 Radio Lane.

6.0 BIBLIOGRAPHY AND SOURCES

Office of State Historic Preservation. California Historic Resources Inventory, Survey Workbook (excerpts). State of California: Sacramento, 1986.

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Parker, Patricia L. National Register Bulletin 24, "Guidelines for Local Surveys: A Basis for Preservation Planning." Washington D.C.: U.S. Government Printing Office, 1985.

United States Department of the Interior. National Register Bulletin 15, "How to Apply the National Register Criteria for Evaluation." Washington, DC: National Park Service, Interagency Resources Division, rev. 1991.

APPENDIX A:
Preparer Qualifications

Pamela Daly, M.S.H.P., Principal Architectural Historian
Daly & Associates, 951 East Beacon Drive, Eugene, OR 97404
(951) 369-1366 daly.rvrsde@sbcglobal.net

Ms. Daly is a Qualified Architectural Historian with more than 26 years of experience in historic resource management and consulting in California, Vermont, New York, and Nevada. She earned a Bachelor of Science degree in Business Management from Elmira College in Elmira, New York, and a Master of Science degree in Historic Preservation at University of Vermont. Ms. Daly's coursework in Historic Preservation included the study of American Architecture, Historic Landscapes, and Building Conservation Techniques.

Ms. Daly has expertise not only in assessing and evaluating classic residential architectural styles of the United States dating from the eighteenth to the twenty-first century, but she has a wide range of experience in the survey and evaluation of military sites and structures in both the western and eastern United States. She has performed studies on airplane hangars, military housing, helicopter hangers, ammunition bunkers, flight simulators, and Cold War radar arrays. Industrial archaeological sites include automobile and railroad bridges, irrigation canals and ditches, gravity-fed water supply systems, sewer treatments systems, gold mines, water-pumping systems, privately-owned reservoirs, electric transmission line towers, roads, historic signage, airplane hangars, steam-powered belt and pulley systems, and a historic zanja.

Studies of built-environment resources include archival research, field investigation, significance criteria and determinations, assessment of impacts/effects, management plans, and mitigation implementation. Mitigation measures include preparation of Historic American Building Survey (HABS) documentation, Historic American Engineering Record (HAER) documentation, Historic American Landscape (HALS) documentation, interpretive signage, layout and production of brochures, websites, and video displays. Ms. Daly has also worked with clients with historically significant buildings to restore or rehabilitate them in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties*.

Ms. Daly has experience with federal agencies including U.S. Air Force, U.S. Navy, U.S. Army Reserve, U.S. Army Corps of Engineers, Bureau of Land Management, the U.S. Forest Service, the National Park Service, and U.S. Fish & Wildlife. She is accepted as a principal investigator for both Architectural History and History by the California State Office of Historic Preservation, and holds the qualifications to work throughout the United States. Ms. Daly belongs to the National Trust for Historic Preservation, Vernacular Architecture Forum, Society of Industrial Archaeology, and Association of Preservation Technology.

APPENDIX B:
California Department of Parks and Recreation (DPR) Inventory Site Forms

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code: 6Z

Other Listings
Review Code | Reviewer | Date

*Resource Name: Old Shasta County Juvenile Justice Center

P1. Other Identifier: 048-140-007

*P2. Location: ☐ Not for Publication ☒ Unrestricted *a. County: Shasta County

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad: Redding Date: 1980 T ; R ; Sec ; .B.M.

c. Address: 2680 Radio Lane City: Redding Zip: 96001

d. UTM: Zone: 10; 552530 mE/ 4488824 mN (G.P.S.)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation: 472 asl

The subject building is located within a 65+ acre parcel owned by Shasta County. The Old SCJJC building is situated in the eastern half of the parcel, which is bound on the north by Breslauer Way, on the south by Radio Lane, on the west by the Sacramento River, and on the east by Eastside Road. The Old SCJJC has the address of 2680 Radio Lane, and is accessed from a driveway on the north side of Radio Lane.

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The Old SCJJC is a one-story building that was originally designed for Shasta County by architect E. Geoff Bangs in 1956. E. Geoffrey Bangs was a Bay Area architect and a graduate of University of California, Berkeley. He earned a cum laude degree in Architecture in 1914 and obtained his master's the following year. After graduation he went to work for the architect John Galen Howard. (J.G. Howard was the supervising architect for the design of the University of California, Berkeley from 1901-1922, as well as the founder and Director of its School of Architecture from 1903 to 1926.)

Bang's work with Howard was interrupted by World War I, where he served with the American Expedition Forces from 1917 to 1919. Upon returning to the U.S. he struck out on his own, while still maintaining a working relationship with Howard. Bangs designed many public buildings and large-scale public housing projects in Northern California. His projects included UC Berkeley's Lewis Hall, the Contra Costa Hall of Records, and the Shasta County Sanatorium, Shasta County Hospital, and courthouses for Shasta and Butte counties.

In 1956, an "artist's concept" of the proposed new juvenile hall for Shasta County was printed in the *Record Searchlight*. The new, one-story facility was described as being "residential in character" with a wood-frame front porch accenting the stucco clad building. The dormitories for girls, boys, and infants would be located to the right and left of the entrance porch, with the front hall made to look residential in appearance. (See Continuation Sheet for additional text.)

*P3b. Resource Attributes: HP14 (Government building); HP39 (Other: Juvenile detention facility, juvenile justice center, juvenile education facility.)

*P4. Resources Present: ☒Building ☐Structure ☐Object ☐Site ☐District ☐Element of District ☐Other (Isolates, etc.)

P5a. Photo or Drawing

P5b. Description of Photo: July 2023. View looking north. Front elevation.

*P6. Date Constructed/Age and Sources: ☒Historic ☐Prehistoric ☐Both
Built 1957 per *Record Searchlight*.

*P7. Owner and Address:
Shasta County Dept. of Probation
2684 Radio Lane
Redding, CA 96001

*P8. Recorded by:
Pamela Daly M.S.H.P.
Daly & Associates
951 E. Beacon Drive
Eugene, OR 97404

*P9. Date Recorded:
August 18, 2023.

*P10. Survey Type:
Intensive-level CEQA.

*P11. Report Citation: Daly, Pamela. *Historic Resource Evaluation of the Old Shasta County Juvenile Justice Center, 2680 Radio Lane, Redding, Shasta County, CA*. Prepared for Shasta County Department of Probation, Redding, CA, August 2023.

*Attachments: ☐NONE ☒Location Map ☐Sketch Map ☒Continuation Sheet ☒Building, Structure, and Object Record ☐District Record ☐Linear Feature Record ☐Photograph Record ☐ Other (List):

BUILDING, STRUCTURE, AND OBJECT RECORD

***NRHP Status Code**: 6Z

***Resource Name: Old Shasta County Juvenile Justice Center**

B1. Historic Name: Shasta County Juvenile Detention Center
B2. Common Name: Juvenile Detention Center
B3. Original Use: same B4. Present Use: abandoned
***B5. Architectural Style:** 1980s Government Vernacular
***B6. Construction History:** Constructed in 1957. Significantly altered in 1992. Abandoned in 2012.
***B7. Moved?** ■No ☐Yes ☐Unknown **Date:** **Original Location:**
***B8. Related Features: None.**

B9a. Architect: E. Geoffrey Bangs b. Builder: Singleton Construction Company, Eureka, CA
***B10. Significance:** None. **Theme:** Social History **Area:** Shasta County
Period of Significance: None **Property Type:** Building **Applicable Criteria:** None

The City of Redding is located within the Rancho Buenaventura lands granted to Pierson B. Reading and partners in August 1844 by Alta California Governor Micheltorena. During the Gold Rush, the area became used for raising and grazing cattle as it was mostly too hilly to be used for growing grains and hay. Settlements were located along the Sacramento River, which had become a major transportation route for moving goods and passengers between Oakland, Sacramento, Shasta City, and the Trinity gold mines.

The Central Pacific Railroad/Southern Pacific Railroad started building a railroad line north in 1869 from its hub just south of Sacramento, along the western side of the Sacramento River. The town of Redding was named after Benjamin B. Redding of Sacramento. Redding had originally been a printer and journalist in Sacramento, obtaining the position of owner-editor of *The State Journal* in partnership with James McClatchy in the early 1850s. He would become mayor of the City of Sacramento in 1856 and go on to serve in the California Legislature, become Secretary of State, and act as a land agent for the Central Pacific Railroad.

The Mariposa Gazette declared in July of 1872 that a "new railroad town near Shasta is named in honor of B .B. Redding of Sacramento". Within 10 years, the Central Pacific Railroad would continue building their line northward, and Redding would become a shipping junction for the lumber and mining industries located in the region to connect with the Sacramento River, or points south. The line passed through Red Bluff, Anderson, Cottonwood, ending (for 10 years) at Redding. (See Continuation Sheet for additional text.)

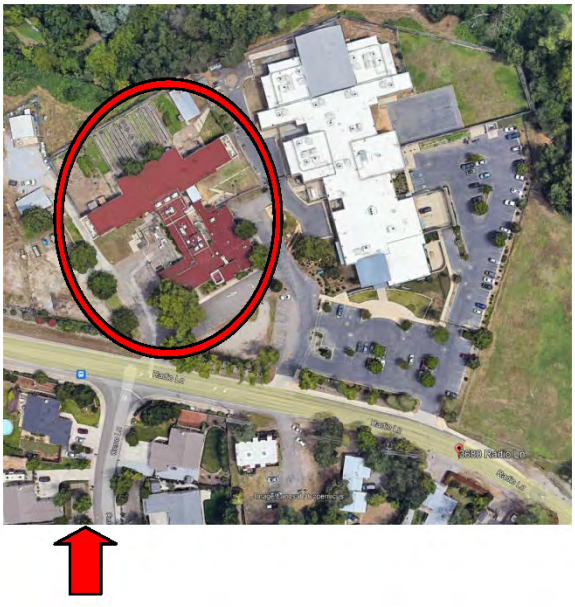
B11. Additional Resource Attributes: None.

***B12. References:** See Continuation Sheet.

B13. Remarks: None.

***B14. Evaluator:** Pamela Daly, M.S.H.P.

***Date of Evaluation:** August 18, 2023



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*Recorded by: Pamela Daly, M.S.H.P. *Date: August 18, 2023 ☒Continuation ☐ Update

P2a. Description, continued:

The building was laid out in an upside down "T" formation, with the administrative, dorm rooms, dining area, and all purpose room situated in the horizontal block of the "T", while the vertical block of the building held the "security wing" of the facility. Based upon the architectural drawing of the garage constructed simultaneously with the Juvenile Hall building, it appears the complex was designed using a modest, California Ranch style of architecture. The horizontal block of the building measures approximately 125 feet long and 42 feet wide. The vertical block (security wing) measures approximately 55 feet long and 35 feet wide.

The Ranch style design was most probably used to intentionally to make the buildings appear non-threatening, and give the impression that it was a simple ranch home in the country. The main building had a cross-gable roof system comprised of a medium-pitch roof clad with thick butt shingles tinted to match the natural wood trim of the doors and windows on the building.

Except for the security wing, the walls and roof framing were constructed of wood members, and the doors and windows appear to have been wood frame as well. The secure wing was constructed along general designs used in locked, detention facilities, with special attention paid to the fire safety of detainees. There are eight individual cells constructed of concrete floors, walls, and ceilings, with metal locking doors. The main building sits on a poured concrete foundation.

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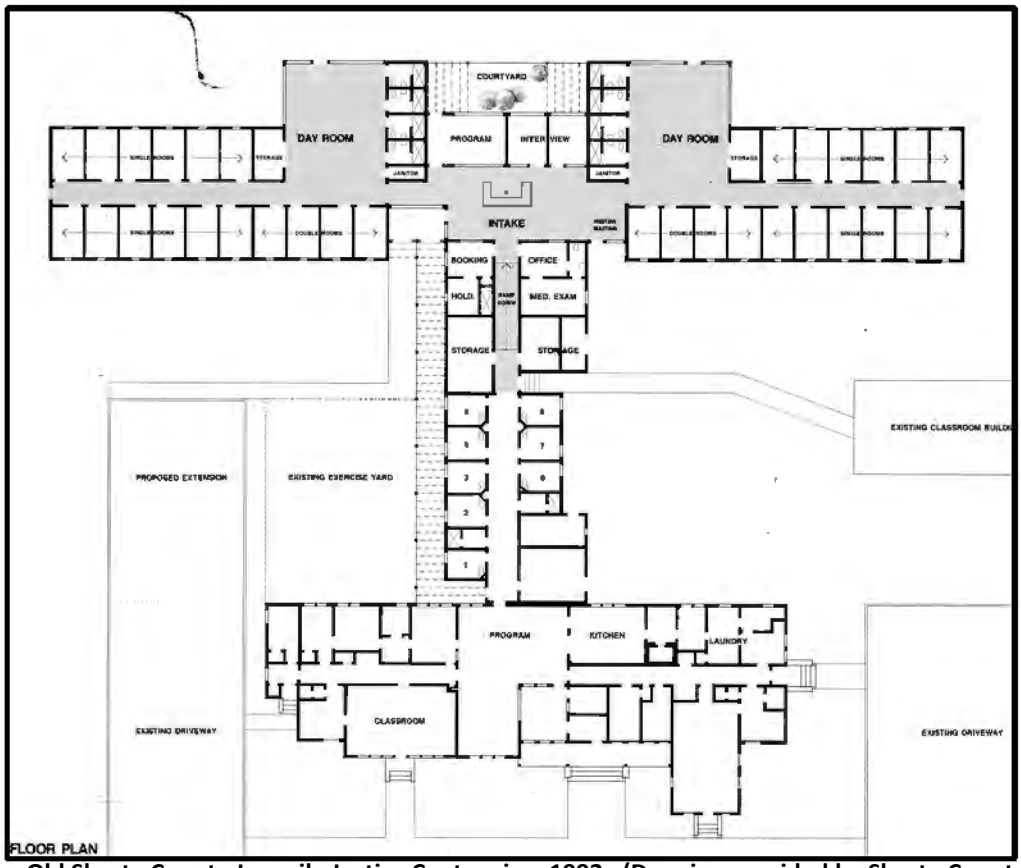

The Old Shasta County Juvenile Justice Center circa 1992. (Drawing provided by Shasta County.)

*Recorded by: Pamela Daly, M.S.H.P. *Date: August 18, 2023 ☒Continuation ☐ Update

B10. Statement of Significance, continued:

The City of Redding was incorporated in 1887, and the mining and refining of various metals, quarrying of stone, lumber processing, and livestock grazing were the main commercial venues in the county. Situated in the most northern area of the Sacramento Valley, dry farming methods were used for growing hay and grains, and some fruit groves (particularly plums) were planted on land along the Sacramento River before the construction of canal systems extending from the river allowed for farming farther from the river.

Shasta County and the City of Redding benefited from the construction of the Shasta Dam and related flood control systems when work began in 1937. Workers and their families inundated the area during the years of the Great Depression, and settled there as work continued on the dam until its completion in 1944. The Trinity River Project and the construction of the Whiskeytown Dam provided needed jobs in the 1960s after the demise of the local mining industry. The two dams and their associated lakes created a recreation-related industry for the City of Redding that has economically supported the community into the twenty-first century.

In the 1890s, reformers working at Jane Addams' Hull House in Chicago made the care and treatment of vulnerable children in the criminal justice system a priority issue to be investigated and improved. The concept of a "parental court" was conceived to divert children away from the adult system and give them a better shot at maturing into upstanding citizens. The Illinois legislature passed a bill in the spring of 1899 creating the world's first juvenile justice system, with the first cases heard at the Cook County Building in downtown Chicago. Unlike in the adult system, the procedures of the first juvenile court were intentionally designed to be informal in the hopes that the deliberations would be more restorative than punitive. "The progressive reformers hoped this approach would allow judges and probation officers to provide individual solutions in each child's case, and increase their chances of success".

Prior to the construction of the Old SCJJC in 1957, both male and female delinquent and youthful offenders, of Shasta County were housed in Ross Cottage, the County's juvenile detention home, or in isolated cells within the Redding City jail. Based upon building plans for Ross Cottage, built in 1942, "Shasta's county's home, which can house up to 16 juveniles, takes cases created by reason of misconduct on the part of the juveniles, and those who may not be delinquent themselves but whose parents are found unfit." Ross Cottage was built upon the location of "the old Bechelli night club property" in Enterprise, and had been named after Judge Albert F. Ross. Those juveniles taken from an unfit home would be quickly transitioned from Ross Cottage to a "widespread foster home program" since they did not need to be confined. Occasionally, Trinity and Tehama Counties would board their delinquents at Ross Cottage since they didn't have a facility for juveniles.

As the population growth in Shasta County continued to increase after 1942, and the boom and bust periods of the building of the dams and logging industry caused increases in the number of families affected by societal pressures, Shasta County found themselves needing to build a juvenile facility to house adolescents charged with serious crimes. Ross Cottage was trying to act as an orphanage for children needing safe and secure housing, at the same time as being a detention center for children who needed to be detained for the safety of the community. Additionally, in January, 1953, a Shasta County grand jury found that the living conditions at Ross Cottage were unacceptably dangerous (especially for fire), and called for the building to be replaced.

The San Francisco architect, Edward Geoffrey Bangs, had designed the new Shasta County courthouse (1500 Court Street), a wing on the County Hospital, and Cascade Sanatorium for Shasta County after World War II. E. Geoffrey Bangs specialized in designing public buildings, and he had "built four such [juvenile detention] homes in other counties and is now building a fifth" home for another municipality. After a contentious meeting of the Shasta County Supervisors in June 1956, E. Geoffrey Bangs was retained to design the new juvenile detention facility, with construction to begin in 1957.

Shasta County awarded the project of constructing the new juvenile center to Singleton Construction Company of Eureka, California, with manager Jack McCall directing the project. The price for the new building at the start of construction was $153,200. (See Continuation Sheet for additional text.)

B10. Statement of Significance, continued:

Criterion 1: The Old SCJJC building at 2680 Radio Lane has not been found to be directly associated with important themes or aspects regarding the history of juvenile justice in Shasta County or California between 1957 and 1972. The juvenile detention center, and later alterations to become a juvenile justice center as well, is just one of many located in California. The Shasta County facility was not discovered to have been an outstanding example of a juvenile detention facility, nor was the facility the site of where important advances in the detention and rehabilitation of juveniles were created and promoted. We could find no evidence that the Old SCJJC was associated with any important themes with the administration of juvenile facilities in Shasta County or California. The property is not eligible for listing in the CRHR under Criterion 1.

Criterion 2: The Old SCJJC building at 2680 Radio Lane has not been found to be directly associated with any important persons or groups in the field of juvenile justice or confinement of juvenile offenders in Shasta County or California. The property is not eligible for listing in the CRHR under Criterion 2.

Criterion 3: The Old SCJJC building at 2680 Radio Lane was designed by the architect E. Geoff Bangs in 1956, and constructed by Singleton Construction Company of Eureka, California in 1957 to replace the aging and inadequate Ross Cottage facility that had served the county since 1942. Shasta County has on file, architectural drawings of the evolution of the Old SCJJC, which allowed an accurate examination of the changes and alterations made to the building since its construction. The Old SCJJC building was designed using a modest, California Ranch style of architecture applied to the "T" plan building of intersecting rectangular masses. The original wood windows, doors, and trim that are considered contributing characteristics to the Ranch style of architecture were removed from the Old SCJJC when it was extensively remodeled and enlarged in 1992. The building does not represent an important example of a juvenile justice complex, and it is not a significant example of the architect E. Geoff Bangs. The subject building does not meet the standards to be considered a significant historical resource for listing in the CRHR under Criterion 3.

Criterion 4: It does not appear that the Old SCJJC at 2680 Radio Lane has the capacity to yield information important in the history of the California or Shasta County.

The Old SCJJC has lost substantial aspects of its physical integrity, and lacks the ability to convey its history through the loss of its original design, materials, workmanship, feeling, and association with a juvenile detention center of the 1950s. Aspects of integrity are used to determine if a property can convey a specific historical theme or period of architectural history important on a local, regional, or state level.

The Old SCJJC building at 2680 Radio Lane will be assigned the California Historical Resource Status Code of 6Z for being ineligible for listing in the CRHR as local historical resource.

The main objective of the assessment of the Old SCJJC building is to provide an evaluation of significance and CRHR eligibility recommendation for the built-environment resource found within the study area. The baseline level of documentation provided in this report presents the information necessary to make such an evaluation. Once the recommendation of eligibility is made, future management considerations for the subject property can be determined.

West elevation of the original main block, with the west elevation of the security wing on the left. View looking east.

South elevation of the 1992 addition to Old SCJJC. View looking north.

East elevation of Old SCJJC. View looking west.

*Recorded by: Pamela Daly, M.S.H.P. *Date: August 18, 2023 ☒Continuation ☐ Update

B12. References:

For P2a.

Record Searchlight. "New Juvenile Hall", September 25, 1956. Page 7.
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For B10.

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Record Searchlight. "Two New Members Named For Juvenile Committee", March 24, 1952. Page 2.
Record Searchlight. "People Invited to 'Open House' at Ross Cottage", November 15, 1945. Page 1.
Record Searchlight. "Two New Members Named For Juvenile Committee", March 24, 1952. Page 2.
Record Searchlight. "Courthouse Called 'Disgrace to County' in Jury Report", January 6, 1953. Page 1.
Record Searchlight. "Supervisors to Receive Detention Home Sketch", April 3, 1956. Page 7.
Record Searchlight. "Bangs Hit Back at Wilsey Attack", June 27, 1956. Page 1.
Record Searchlight. "Home for Juveniles", June 1, 1957. Page 11.

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

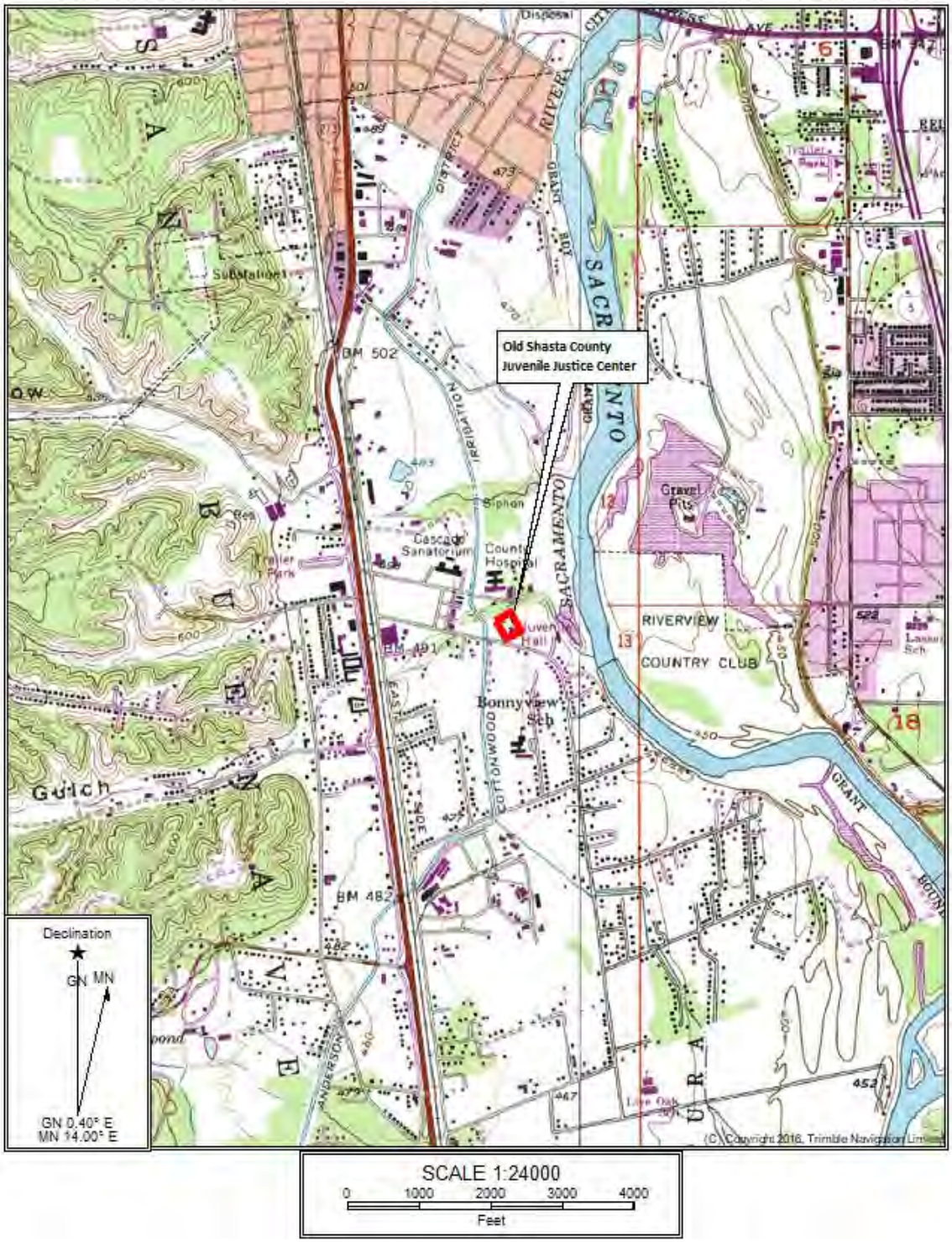
Primary #
HRI#
Trinomial

***Resource Name:** Old Shasta County Juvenile Justice Center

***Map Name:** Redding, CA

***Scale:** 1:24,000

***Date of Map:** 1980



***Required information**

Attachment F

Hazardous Materials Abatement Work Plan

Hazardous Materials Abatement Work Plan

Old Juvenile Justice Center
2680 Radio Lane, Redding, CA
January 2022
ACC Project Number: 2051-038.00

Client: Shasta County
1855 Placer St.
Redding, CA
Local Contact: Shawn Ankeny
Email: sankeny@co.shasta.ca.us
(530) 245-6810

Consultant: ACC Environmental Consultants, Inc.
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(510) 638-8400
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Fax: (510) 638-8404

Prepared by: Chris Yama, Certified Asbestos Consultant #98-2356, CDPH M-3814

1.0 Project Overview

Demolition, Removal, and Disposal of the Old Juvenile Justice Center (Juvenile Hall) located at 2680 Radio Lane, Redding, California:

The project includes removal and disposal of asbestos-containing floor tile and mastic, drywall and joint compound, ceramic tile underlayment roof mastic and roofing. The point counted <1% point counted asbestos drywall and compound shall be disposed of as <1% asbestos non-hazardous asbestos waste. All asbestos waste shall be double bagged and goosenecked or burrito wrapped with two layers of 6 mil poly or one layer of 10 mil poly. Piles of waste shall be placed in waste containers or covered with poly at the end of each day. All waste containers shall be made leak tight with poly-sheeting and duct tape. Loose and peeling paints shall be removed prior to demolition. Paint chips shall be disposed of as hazardous RCRA waste. This building will require a ten-day demolition notification to NESHAPS/CARB. All notification requirements and associated fees shall be the responsibility of the Contractor. The concrete slab/foundation will need to be removed and disposed of once the building debris is cleaned up and bagged up. The Contractor shall have a C21 and C22 Contractor's License. Large metal objects may be cleaned and recycled. All workers shall have appropriate asbestos and lead training. Contractor shall comply with Shasta County Zero Dust Policy. Submit a traffic control plan to Shasta County Representative. Contractor shall supply generator access for Consultant's 2-3 Sampling Pumps.

This is a Prevailing Wage Job. Contractor shall fill out all paperwork required and comply with all prevailing wage requirements by applicable law, regulations, and as otherwise may be required by Shasta County.

2.0 Scope of Work

All work shall be performed in accordance with applicable local, state and federal regulations, standard industry practices and specific requirements of this Work Plan. When a conflict exists, the more stringent requirement shall

apply. Furthermore, the Contractor shall familiarize all employees with this Work Plan and site conditions.

2.01 Remove and dispose of the following materials:

Asbestos

Sample Number	Material Description	Material Location	Results	Approx. Quantity*	NESHAPS Category[1]	OSHA Class[2]
JC-1-1, 2, 3, 4, 5, 6, & 7	Gypsum Wallboard and Joint/Taping Compound	Throughout Building	Drywall & Tape: No Asbestos Detected Beige Joint Compound: 2% Chrysotile Asbestos White Joint Compound: No Asbestos Detected Paint: No Asbestos Detected *Composite Result by PLM 400 Point Count: <1% Chrysotile Asbestos*	26,500 SF	Unclassified	Class 2
FA-15-1, 2	9"x9" Brown Streaked Vinyl Floor Tile, Black Felt, Black Mastic over Wood Subfloor	Throughout East Building	Yellow Mastic: No Asbestos Detected Tile: 5% Chrysotile Asbestos Mastic: No Asbestos Detected Felt: No Asbestos Detected	2,400 SF (Partially concealed under carpet)	Category I	Class 2
CU-21-1, 2	Brown/Gray Adhesive 4" and 6" Cream Color Ceramic Wall Tiles	East Building Restrooms – Walls	Adhesive: 2% Chrysotile Asbestos	250 SF	Category II	Class 2
FA-24-1, 2	Concealed Tan Vinyl Floor Tile, Black Mastic, Black Felt on Wood Subfloor (Bottom Layer)	North Hallway, North Office – Partial Floors	Tile: 5% Chrysotile Asbestos Mastic: No Asbestos Detected Felt: No Asbestos Detected	650 SF	Category I	Class 2
RM-35-1, 2	Rolled Roofing Material	East Building Roof	Stones: No Asbestos Detected Tar: No Asbestos Detected Felt: 40% Chrysotile Asbestos	14,100 SF	Category I	Class 2
RP-37-1, 2	Gray/Black Patching Compound	Exterior All Areas – Partial Penetrations	Black Mastic: 10% Chrysotile Asbestos	400 SF	Category I	Class 2
RP-38-1, 2	Light Gray Roof Patching Compound	Exterior All Areas – Partial Penetrations	Mastic: 10% Chrysotile Asbestos	200 SF	Category I	Class 2
RM-41-1, 2	Rolled Roofing Material	Exterior All Areas – Partial Parapet Walls	Roof Shingle: No Asbestos Detected Felt: 40% Chrysotile Asbestos	360 SF	Category I	Class 2
WP-47-1, 2	Window Putty	All Exterior Areas – Partial Windows	Putty: 5% Chrysotile Asbestos Paint: No Asbestos Detected	150 LF	Category II	Class 2
FD-50	Fire Doors	Throughout Building	Assumed Asbestos	31 Each	Friable RACM	Class 2
PI-51	Pipe Insulation or elbows	Throughout Building-Partially concealed in walls and above ceilings.	Assumed Asbestos	150 LF	Friable RACM	Class 1

Other Hazardous Materials

Universal Waste/Other Hazardous Wastes	Estimated Quantity
Florescent/Mercury Vapor Light Tubes (4'equivalent)	430 Each
Suspect PCB-containing Light Ballasts-Assumed PCBs	215 Each
HVAC Units-CFCs	15 Each
Dry Transformer-Assumed PCBs	1 Each

Section 2.1 Summary of Sampling Results

2.1.1 Summary of Sampling Results

Asbestos

Sample Number	Material Description	Material Location	Results	Approx. Quantity*	NESHAPS Category[1]	OSHA Class[2]
JC-1-1, 2, 3, 4, 5, 6, & 7	**Gypsum Wallboard and Joint/Taping Compound**	**Throughout Building**	**Drywall & Tape: No Asbestos Detected Beige Joint Compound: 2% Chrysotile Asbestos White Joint Compound: No Asbestos Detected Paint: No Asbestos Detected *Composite Result by PLM 400 Point Count: <1% Chrysotile Asbestos***	**26,500 SF**	**Unclassified**	**Class 2**
TC-2-1, 2, 3, 4, & 5	Knock-Down Texturing Compound over Wallboard	East Building – Partial Ceilings, Partial Walls	Texture: No Asbestos Detected Paint: No Asbestos Detected	N/Q	N/A	N/A
BA-3-1, 2	Cream Color Adhesive for Vinyl Base Cove	All Interior Areas – Partial Walls	Mastic: No Asbestos Detected	N/Q	N/A	N/A
PL-4-1, 2, 3, 4, & 5	Smooth Wall Plaster	East Building – Partial Walls	Gray Plaster: No Asbestos Detected White Plaster: No Asbestos Detected Paint: No Asbestos Detected	N/Q	N/A	N/A
CK-5-1, 2	Tan Window Caulking	East Building – Partial Windows	Non-Fibrous: No Asbestos Detected Paint: No Asbestos Detected	N/Q	N/A	N/A
TC-6-1, 2, 3, 4, 5, 6, & 7	Orange-Peel Texturing Compound over Wallboard	East Building – Partial Windows; West & Center Building – Partial Walls	Texture: No Asbestos Detected Paint: No Asbestos Detected	N/Q	N/A	N/A
CK-7-1, 2	Black Window Caulking	West Building – Partial Interior Windows	Non-Fibrous: No Asbestos Detected	N/Q	N/A	N/A
BA-8-1, 2	Dark Brown Adhesive for Vinyl Base Cove	All Areas – Partial Walls	Mastic: No Asbestos Detected	N/Q	N/A	N/A
TC-9-1, 2, & 3	Texturing Compound over Concrete Walls	Solitary Confinement Hallway and Cells – Partial Interior Walls	Texture: No Asbestos Detected Paint: No Asbestos Detected	N/Q	N/A	N/A
WP-10-1, 2	Brown Window Putty	Courtyard Windows – Partial Interior Windows	Putty: No Asbestos Detected Paint: No Asbestos Detected	N/Q	N/A	N/A
JM-11-1, 2	White Joint Mudding for HVAC Ducts	All Areas – Partial HVAC Ducts	Non-Fibrous: No Asbestos Detected	N/Q	N/A	N/A
CT-12-1, 2	2'x4' White Gypsum Board Suspended Ceiling Tiles	Holding Hallways – Partial Ceilings	Drywall: No Asbestos Detected Paint: No Asbestos Detected	N/Q	N/A	N/A
CT-13-1, 2	Brown Glue for 1'x1' Fissured Ceiling Tiles	Holding Common Areas, Front Entry – Partial Walls, Ceilings	Mastic: No Asbestos Detected Fibrous: No Asbestos Detected Paint: No Asbestos Detected	N/Q	N/A	N/A
AD-14-1, 2	Yellow Adhesive for White Plastic Wall Covering	North Restroom, Janitor's Closets – Partial Walls	Mastic: No Asbestos Detected	N/Q	N/A	N/A
FA-15-1, 2	**9"x9" Brown Streaked Vinyl Floor Tile, Black Felt, Black Mastic over Wood Subfloor**	**Throughout East Building**	**Yellow Mastic: No Asbestos Detected Tile: 5% Chrysotile Asbestos Mastic: No Asbestos Detected Felt: No Asbestos Detected**	**2,400 SF (Partially concealed under carpet)**	**Category I**	**Class 2**
CA-16-1, 2	Yellow Mastic for Rolled Carpeting, Gray Leveling Compound over Wood Subfloor	East Building – Partial Floors	Non-Fibrous: No Asbestos Detected Mastic: No Asbestos Detected	N/Q	N/A	N/A

Sample Number	Material Description	Material Location	Results	Approx. Quantity*	NESHAPS Category[1]	OSHA Class[2]
SV-17-1, 2	Tan Pebble Patterned Sheet Vinyl Flooring, White Felt, Cream Adhesive	East Building – Partial Floors	Sheet Flooring: No Asbestos Detected Fibrous Backing: No Asbestos Detected Mastic: No Asbestos Detected	N/Q	N/A	N/A
TG-18-1, 2	White & Gray Grout for 2" and 1" Tan & Cream Color Ceramic Floor Tile	East Building Restrooms – Floors	Grout: No Asbestos Detected	N/Q	N/A	N/A
CU-19-1, 2	Gray Underlayment for 2" and 1" Tan and Cream Color Ceramic Floor Tile	East Building Restrooms – Floors	Cementitious: No Asbestos Detected	N/Q	N/A	N/A
TG-20-1, 2	White Grout for 4" and 6" Cream Color Ceramic Wall Tile	East Building Restrooms – Partial Walls	Grout: No Asbestos Detected	N/Q	N/A	N/A
CU-21-1, 2	**Brown/Gray Adhesive 4" and 6" Cream Color Ceramic Wall Tiles**	**East Building Restrooms – Walls**	**Adhesive: 2% Chrysotile Asbestos**	**250 SF**	**Category II**	**Class 2**
SV-22-1, 2	Concealed Blue Pebble Patterned Sheet Vinyl Flooring, Clear Mastic, Yellow Carpet Mastic (Top Layer)	North Hallway, North Office – Partial Floors	Sheet Flooring: No Asbestos Detected Mastic: No Asbestos Detected	N/Q	N/A	N/A
SV-23-1, 2	Concealed White and Black Speckled Sheet Vinyl Flooring, White Mastic (Middle Layer - between two layers of wood & flooring)	North Hallway, North Office – Partial Floors	Sheet Flooring: No Asbestos Detected Mastic: No Asbestos Detected Fibrous Backing: No Asbestos Detected	N/Q	N/A	N/A
FA-24-1, 2	**Concealed Tan Vinyl Floor Tile, Black Mastic, Black Felt on Wood Subfloor (Bottom Layer)**	**North Hallway, North Office – Partial Floors**	**Tile: 5% Chrysotile Asbestos** **Mastic: No Asbestos Detected** **Felt: No Asbestos Detected**	**650 SF**	**Category I**	**Class 2**
SV-25-1	Brown Pebble Patterned Sheet Vinyl Flooring, Cream Color Mastic on Wood Subfloor	North Restroom – Floors	Sheet Flooring: No Asbestos Detected Fibrous Backing: No Asbestos Detected Mastic: No Asbestos Detected	N/Q	N/A	N/A
SU-26-1, 2	Interior Stucco	Center Hallway, Partial Walls, Partial Ceiling	Gray Cementitious: No Asbestos Detected Tan Cementitious: No Asbestos Detected Paint: No Asbestos Detected	N/Q	N/A	N/A
FA-27-1, 2	12"x12" Green Streaked Vinyl Floor Tile, Black Mastic	West Offices, West Vestibules – Partial Floors	Tile: No Asbestos Detected Mastic: No Asbestos Detected	N/Q	N/A	N/A
FA-28-1, 2	12"x12" Gray Streaked Vinyl Floor Tile and Yellow Mastic	Holding Lobby, Holding Hallways – Partial Floors	Tile: No Asbestos Detected Mastic: No Asbestos Detected	N/Q	N/A	N/A
CA-29-1, 2	Yellow Mastic for Gray Rolled Carpet	Holding Lobby, Holding Hallways – Partial Floors	Carpet: No Asbestos Detected Mastic: No Asbestos Detected	N/Q	N/A	N/A
TG-30-1, 2	White Grout for 4"x4" White Ceramic Wall Tiles	Holding Common Areas Restrooms – Partial Walls	Grout: No Asbestos Detected	N/Q	N/A	N/A
CU-31-1, 2	White/Gray Underlayment for 4"x4" White Ceramic Wall Tiles	Holding Common Areas Restrooms – Partial Walls	Non-Fibrous: No Asbestos Detected	N/Q	N/A	N/A
TG-32-1, 2	White Grout for 2"x2" White Speckled Ceramic Floor Tile	Holding Common Areas Restrooms – Floors	Grout: No Asbestos Detected	N/Q	N/A	N/A

Sample Number	Material Description	Material Location	Results	Approx. Quantity*	NESHAPS Category[1]	OSHA Class[2]
CU-33-1, 2	Gray Underlayment for 2"x2" White Speckled Ceramic Floor Tile	Holding Common Areas Restrooms – Floors	Non-Fibrous: No Asbestos Detected	N/Q	N/A	N/A
SU-34-1, 2, 3, 4, & 5	Exterior Stucco	East Building – Partial Exterior Walls	Gray Cementitious: No Asbestos Detected Off-White Cementitious: No Asbestos Detected Beige Cementitious: No Asbestos Detected Paint: No Asbestos Detected	N/Q	N/A	N/A
RM-35-1, 2	**Rolled Roofing Material**	**East Exterior Building – Partial Roof**	**Stones: No Asbestos Detected** **Tar: No Asbestos Detected** **Felt: 40% Chrysotile Asbestos**	**14,100 SF**	**Category I**	**Class 2**
JM-36-1, 2	Gray Joint Mudding	East Exterior Building – Partial Pipes	Mastic: No Asbestos Detected	N/Q	N/A	N/A
RP-37-1, 2	**Gray/Black Patching Compound**	**Exterior All Areas – Partial Penetrations**	**Black Mastic: 10% Chrysotile Asbestos**	**400 SF**	**Category I**	**Class 2**
RP-38-1, 2	**Light Gray Roof Patching Compound**	**Exterior All Areas – Partial Penetrations**	**Mastic: 10% Chrysotile Asbestos**	**200 SF**	**Category I**	**Class 2**
JM-39-1, 2	White Joint Mudding	Exterior East & Center Roof: Partial HVAC	Non-Fibrous: No Asbestos Detected	N/Q	N/A	N/A
JM-40-1, 2	Gray Joint Mudding	Exterior East & Center Roof – Partial HVAC	Non-Fibrous: No Asbestos Detected	N/Q	N/A	N/A
RM-41-1, 2	**Rolled Roofing Material**	**Exterior All Areas – Partial Parapet Walls**	**Roof Shingle: No Asbestos Detected** **Felt: 40% Chrysotile Asbestos**	**360 SF**	**Category I**	**Class 2**
RM-42-1, 2	Rolled Roofing Material	West Exterior Building – Partial Roof	Silver Paint: No Asbestos Detected Stones: No Asbestos Detected Tar: No Asbestos Detected Felt: No Asbestos Detected	N/Q	N/A	N/A
RM-43-1, 2	Rolled Roofing Material	Exterior All Areas – Partial Parapet Walls	Stones: No Asbestos Detected Tar: No Asbestos Detected Felt: No Asbestos Detected	N/Q	N/A	N/A
SV-43-1, 2	White Pebble Patterned Sheet Vinyl Flooring, Gray Felt, Yellow Mastic	Exterior Access Restrooms – Partial Floors	Sheet Flooring: No Asbestos Detected Fibrous Backing: No Asbestos Detected Mastic: No Asbestos Detected	N/Q	N/A	N/A
SU-45-1, 2, 3, 4, & 5	Exterior Stucco	West Exterior Building – Partial Walls	Gray Cementitious: No Asbestos Detected White Cementitious: No Asbestos Detected Paint: No Asbestos Detected	N/Q	N/A	N/A
WC-46-1, 2	Wallpaper and Associated Adhesive	Courtroom, Judge Chambers, Clerk's Office	Semi-Fibrous: No Asbestos Detected Mastic: No Asbestos Detected	N/Q	N/A	N/A
WP-47-1, 2	**Window Putty**	**All Exterior Areas – Partial Windows**	**Putty: 5% Chrysotile Asbestos** **Paint: No Asbestos Detected**	**150 LF**	**Category II**	**Class 2**
SK-48-1	White Sink Undercoating	All Areas – Sinks	Coating: No Asbestos Detected	N/Q	N/A	N/A
MI-49-1	Terrazzo Mop Sink	Kitchen, Janitor's Closets – Mop Sinks	Non-Fibrous: No Asbestos Detected	N/Q	N/A	N/A
FD-50	**Fire Doors**	**Throughout Building**	**Assumed Asbestos**	**31 Each**	**Friable RACM**	**Class 2**

**Approximate quantities should be verified during any project planning as the building was occupied during the survey and ACC was unable to perform a fully destructive investigation to identify all concealed conditions.*

[1]*EPA's NESHAPS regulations define categories of asbestos-containing materials (ACM) based on their potential of asbestos fiber release when disturbed:*

- *Friable - Any material containing more than 1 percent asbestos that, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure.*
- *Category I Non-friable ACM (Cat 1 NF) - Asbestos-containing packings, gaskets, resilient floor covering and asphalt roofing products containing more than 1 percent asbestos.*
- *Category II Non-friable ACM (Cat II NF) - Any material, excluding Category I non-friable ACM containing more than 1 percent asbestos as determined using the methods specified under AHERA, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.*

[2]*OSHA's Asbestos in Construction Standard (Federal - 29 CFR 1910.126 and California – 8 CCR 1529) define specific "Classes" of work based on the risk of exposure to employees with the potential for disturbance of asbestos-containing materials. The classes of work are defined as*

- *Class 1 - Asbestos-related activities involving the removal of thermal systems insulation (TSI) and surfacing ACM or presumed ACM.*
- *Class 2 - Asbestos-related activities involving the removal of ACM which are not TSI or surfacing ACM.*

Lead

Sample Number	Material Description	Material Location	Lead Content	Approximate Quantity*
PT-1	Gray Paint over Textured Concrete Walls	Solitary Confinement Hallway and Cells – Walls, Ceilings	<0.006 wt%	100 SF
Pb-2	2" and 1" Cream Color Ceramic Floor Tile	East Building Restrooms – Floors	<6 mg/kg	350 SF
Pb-3	**4" and 6" Ceramic Wall Tile**	**East Building Restrooms – Partial Walls**	**1,100 mg/kg**	**250 SF**
Pb-4	2" and 1" Tan Ceramic Floor Tile	East Building Restrooms – Floors	<7 mg/kg	350 SF
Pb-5	**4" Cream Color Ceramic Wall Tile**	**East Building Restrooms – Partial Walls**	**450 mg/kg**	**250 SF**
Pb-6	**4"x4" White Ceramic Wall Tile**	**Holding Common Areas Restrooms – Partial Walls**	**7 mg/kg**	**1,300 SF**
Pb-7	2"x2" White Speckled Ceramic Floor Tile	Holding Common Areas Restrooms – Floors	<6 mg/kg	500 SF
PT-8	Brown Exterior Paint over Wood Trim	Exterior All Areas – Partial Walls	<0.006 wt%	300 SF
PT-9	**Tan Exterior Paint over Wood Siding**	**Exterior East Building – Partial Walls**	**0.067 wt%**	**Intact**
PT-10	Brown Exterior Paint over Wood Siding	Exterior West – Partial Walls	<0.006 wt%	1,500 SF
PT-11	**Brown Paint over Metal Handrails**	**Exterior All Areas – Handrails**	**0.011 wt%**	**Intact**
PT-12	**Tan Exterior Paint over Stucco**	**West Building – Partial Walls**	**0.073 wt%**	**Intact**
PT-13	White Interior Paint over Textured Wallboard	East Building – Partial Walls	<0.006 wt%	Intact
PT-14	Tan Interior Paint over Textured Wallboard	Center Building – Partial Walls	<0.006 wt%	Intact
PT-15	Light Gray Interior Paint over Concrete Walls	West and Center Building – Partial Walls, Ceilings	<0.006 wt%	250 SF
PT-16	Gray/Red Paint over Concrete	West and Center Buildings – Partial Floors, Walls, Ceilings	<0.007 wt%	2,200 SF
PT-17	Gray/Red Paint over Metal Trim	West and Center Buildings – Trim	<0.007 wt%	700 SF
PT-18	White Interior Paint over Metal Trim	East Building – Trim	<0.006 wt%	Intact
Pb-19	**Terrazzo Mop Sink**	**Kitchen, Janitor's Closets – Mop Sinks**	**42 mg/kg**	**25 SF**

Other Hazardous Materials

Universal Waste/Other Hazardous Wastes	Estimated Quantity
Florescent/Mercury Vapor Light Tubes (4'equivalent)	430 Each
Suspect PCB-containing Light Ballasts-Assumed PCBs	215 Each
HVAC Units-CFCs	15 Each
Dry Transformer-Assumed PCBs	1 Each

3.0 Disposition of Movable Items

The Contractor will be responsible for removing all items from the work area required to perform abatement. Additionally, the Contractor is responsible for the removal of any fixtures that contact any materials that will disturb any hazardous materials.

4.0 Pre-Cleaning

If applicable or required, Contractor shall perform all necessary pre-cleaning. However, no pre-cleaning is expected.

5.0 Access

Access to the work areas and use of building facilities shall be coordinated with ACC and a representative from Shasta County.

6.0 Work Area Set-up

6.1 Work area set-up requirements:

All checked items apply to work area set-up requirements

X	Full Containment	X	Fire Retardant Poly	X	-0.02" Negative Pressure
	Poly Walls (min. 4-mil.)	X	Three-stage Decon w/ Shower		-0.04" Negative Pressure
	Poly Floors (2 layers 6-mil.)		Two-stage w/ Hudson Wash Station		Charcoal Filters on NPUs
	Poly Pony-wall above ceiling		One-stage w/ Hudson Wash Station		Use Building Power
	Mini-containment		Separate Load-out	X	Contractor Supplied Power
	Clean-cube		Secure/Isolated Clean-room		Temporary Power Box
X	Splash Guards		"Z" Airlocks		Building Water
	Glove Bag		No Decon Required	X	Contractor Supplied Water
X	Critical Barriers (2 layers)		Seal Floor Penetrations	X	Temporary Lighting
X	Drop Sheet (around perimeter of bldg.)		Protect Existing Floor		DOP Test NPUs (ANSI/ UI 586-1990)
	View Ports (must see all work areas)	X	Shut-down HVAC		DOP Test Vacuums (ANSI/ UI 586-1990)
	Plywood Construction Barrier	X	Barrier Tape	X	Warning Signs
	NPU Exhaust Location: Outside				
X	Other: Contractor shall install warning signs and barrier tape around work area. Contractor shall meet State Storm Water Requirements. Cover debris piles with poly at the end of each day.				

6.2 General Set-up Requirements

6.2.1 No removal work may commence until the Contractor has notified the Consultant, the Consultant has inspected the containment set-up, any deficiencies have been corrected by the Contractor and the Consultant has given permission to commence removal activities.

6.2.2 Any modifications for hook-ups shall be the responsibility of the Contractor for Contractor supplied water and electricity.

6.2.3 All polyethylene sheeting used on this project shall be fire-retardant.

6.2.4 If required, critical barriers of 6-mil polyethylene sheeting shall be placed over all doors, windows, HVAC openings, and covering all furnishings during asbestos removal work.

6.2.5 If required, the Contractor is responsible for assuring that all mechanical systems have been shut down and locked out, and adequately sealed with two layers of 6-mil polyethylene, to prevent contamination from entering systems.

6.2.6 Decontamination units equipped with showers require use of a watertight pan to contain water. All waste water shall be filtered to a minimum of 1 micron prior to discharge into the sanitary sewer system.

6.2.7 Removable drop cloths in the work area are required at all times.

6.2.8 During any use of solvents and/or mastic removers, all filtration units shall be equipped with charcoal filters. Charcoal filters are to be replaced daily during the course of abatement activities. All filtration units and vacuum cleaners used on this project shall be equipped with HEPA filtration.

6.2.9 GFCI are required on all electrical circuits in use.

6.2.10 Refer to procedures section for additional containment requirements.

7.0 Security/Safety

The Abatement Contractor is responsible for site safety and security throughout the project.

8.0 Worker Protection

The following personal protective equipment (PPE) and engineering controls are required during project activities that may cause exposure at or above regulatory exposure limits to hazards during set-up, removal, final cleaning and encapsulation activities. Furthermore, the Contractor must abide by all regulatory requirements, including but not limited to training, medical surveillance and exposure monitoring, for all employees and other individuals entering restricted work areas. Respirator cartridge selection shall be based on work area hazards and chemicals used during project activities. At a minimum, respirators shall be equipped with HEPA (P100 equivalent) cartridges or, during the use of any solvent, combination organic vapor/HEPA respirator filters.

8.1 Personal Protective Equipment (to be confirmed by Contractor's personal exposure monitoring and adjusted as necessary).

All checked items apply to PPE requirements

X	1/2- Face Respirator	**X**	Head Protection	**X**	Disposable Protective Suits
	Full Face Respirator	**X**	Hearing Protection		Cloth Coveralls
	PAPR		Face Protection		Disposable Rubber Gloves
	Supplied Air Respirator	**X**	Eye Protection	**X**	Work Gloves
	SCBA	**X**	Steel Toe/Steel Shank Boots	**X**	Disposable Viton Gloves
	15-minute escape bottle		Disposable Foot Coverings	**X**	Hand Washing Station
X	Other: Contractor shall wear safety harnesses and use fall protection equipment when working on roof.				

8.2 Engineering Controls

All checked items apply to engineering controls during project activities

	Work Area Foggers	X	Local Exhaust/Ventilation	**X**	Task Lighting
X	Wet Removal Methods	**X**	4-Air Changes Per Hour	**X**	Containment as Described in Section 6.0
X	Daily Smoke Test of Containment	**X**	Daily Visual Inspection of Containment		
	Other:				

8.3 Personnel Decontamination Procedure

All personnel leaving a regulated area or containment area shall comply with the following decontamination sequence:

8.3.1 Remove and discard any suit, clothing, or cartridge prior to leaving the Work Area.

8.3.2 Proceed into the decontamination unit.

8.3.3 Enter the Decontamination unit and, keeping respirator in place, remove disposable suit and all other contaminated items, including gloves and boots. Place contaminated clothing in appropriately labeled bags.

8.3.4 With the respirator still in place, rinse off thoroughly using the Hudson spray washer or shower. If wearing dual cartridge respirators, make sure the cartridges are completely soaked before removing the respirator and disposing of the cartridges. If cartridges are to be reused, completely seal the cartridge opening with tape.

8.3.5 Proceed out of the decontamination unit and dress in a set of clean street clothes, and return respirator to the storage area.

9.0 Occupancy

The building is not occupied. The surrounding properties have people working on their properties. It is the responsibility of the Contractor to maintain site safety and security for the duration of the project.

10.0 Air Sampling and Work Area Clearance

The following schedule of verification sampling will be utilized by the consultant during this project. This schedule is subject to change depending on Site specific conditions.

10.1 Daily Air Samples

The consultant may obtain down-wind and/or indoor air samples to verify effectiveness of Contractor's engineering controls and work procedures. Personal sampling required by OSHA is the responsibility of the Contractor.

10.2 Clearance Air Samples

Each work area shall be cleared by air sampling, wipe sampling and/or visual inspection as deemed appropriate by ACC Environmental. The Contractor shall be responsible for all costs associated with additional testing and project management to achieving a passing set of clearance results if the first set of clearance samples fails to meet clearance of each phase. Clearance criteria shall be as follows:

10.2.1 Asbestos Clearance (Air sampling)

- Satisfactory visual inspection by ACC Environmental
- 0.01 fibers per cubic centimeter of air (f/cc) by PCM
- 70 S/mm^2 by TEM (AHERA).

10.2.2 Lead Clearance

- Satisfactory visual inspection by ACC Environmental
- Optional clearance wipe sampling with an acceptable clearance of <400 µg/ft^2, as deemed appropriate by ACC Environmental.

10.2.3 Post-Remediation Mold Sampling (Not applicable)

The abatement work area is cleared when the work area is visually clean and the encapsulant has been correctly applied to all affected areas. Wipe and/or air spore trap samples may be collected randomly and analyzed for fungi to verify work area and common area cleanliness.

A spore trap sampler will be used to collect fungi samples on specific media. Samples will be collected inside the work area, adjacent to the area of demolition/abatement. In addition, an outdoor control sample will be collected. A single air sample for fungi will be collected at each work area during each day of demolition/abatement.

The work area shall be considered clean with respect to fungi when the inside work area samples are consistent or below concentrations and fungal types found outdoors. Mycotoxin producing fungi, such as *Stachybotrys chartarum* and *Aspergillus versicolor*, may not be above acceptable indoor levels.

Should the work area not appear visually clean, the Contractor shall ensure that the negative pressure enclosure remains in place and shall re-clean and reapply the biocide as stated in the procedures. The work area shall meet the visual clearance criteria following the re-cleaning activities and prior to encapsulation and re-occupancy.

11.0 Disposal Requirements

All wastes generated from the completion of this Work Plan shall be disposed of according to all local, state and federal regulations. *The Contractor is responsible for characterization and disposal of all wastes.*

11.1 Asbestos Waste and Debris

The asbestos waste and debris contaminated with asbestos from the Old Juvenile Justice Center shall be disposed of as non-hazardous asbestos waste, unless otherwise instructed by the on-site representative from ACC Environmental. If the ACC project manager determines the waste to be friable, the Contractor shall dispose of the waste as friable hazardous asbestos waste. The debris shall be burrito wrapped in 10 mil poly and duct tape or bagged and goosenecked with duct tape. Non-friable asbestos shall be disposed of as non-hazardous asbestos waste. Fire doors and pipe insulation shall be disposed of as Hazardous Asbestos waste.

11.2 Lead Waste

The lead waste shall be disposed of as RCRA Hazardous Waste. Waste to be profiled by the Contractor. The waste shall be disposed of in a lined and labeled metal drum.

11.3 Other Hazardous Materials

Light tubes shall be disposed of as Universal hazardous waste. PCB ballasts shall be disposed of as Hazardous PCB waste. Mercury thermostats shall be disposed of as hazardous mercury waste. CFCs shall be evacuated by an EPA certified CFC Contractor. Contractor shall dismantle dry transformer to look for PCBs. If PCBs are found they shall be disposed of as Hazardous PCB waste.

12.0 Permits and Notifications

Obtaining required permits and/or notifications to all agencies shall be the responsibility of the Contractor. Contractor shall submit a 10 day notification for demolition of buildings on the property.

13.0 Submittals

The following information must be provided prior to the contract being awarded:

1. Lump sum bid amounts according to the described scope of work.
2. Unit pricing for all materials identified in the scope of work.
3. Pricing for loaded man-hour rate (regular, evening, and weekend).
4. Copies of current licenses and certifications.
5. Current insurance information.
6. Copies of any violations issued by regulatory agencies.
7. Brief project design descriptions, including the following items:
5. Project schedule (time, days and number of work shifts);
6. Anticipated production rate (how many shifts to perform work);
7. Project staffing (number of personnel);
8. Work platforms (scaffolding, man lift, etc.);
9. Containment, debris collection, engineering controls;

The following must be provided prior to commencement of work:

1. Copies of all notifications and permits.
2. AHERA asbestos worker training certificates, lead worker training certificates, fit testing and medical information.
3. Insurance certificate naming Shasta County and ACC Environmental Consultants, Inc. as additionally insured.
4. Emergency contact list of personnel assigned to the project.
5. Written request for approval of any plans to deviate from the written work plan.
6. Scaffolding plans and any applicable engineering approvals.
7. Detailed project design descriptions, including the following items:
    a. Project schedule (time, days and number of work shifts);
    b. Anticipated production rate (how many shifts to perform work on each side of building);
    c. Project staffing (number of personnel);
    d. Work platforms (scaffolding, man lift, etc.);
    e. Containment, debris collection, engineering controls;
    f. Sidewalk/street closures.

The following must be submitted at the completion of the project:

1. Copies of all daily logs indicating procedures followed, etc.
2. Copies of all personal air/blood monitoring results.
3. Copies of all waste manifests and weight tickets.
4. Waste characterization reports.

14.0 Schedule of Work Activities

To be determined

15.0 Procedures

All work shall be conducted to meet applicable local, state, and federal requirements, and per the attached removal procedures or any other published attachments to this work plan.

15.1 Removal of asbestos-containing floor tile and mastic.

15.1.1 Set up work area isolation and ventilation of the work area in accordance to Section 6.0. Contractor shall install barrier tape and warning signs around the work areas. Contractor shall meet State Storm Water Requirements Upon approval of the work area by the Consultant, Contractor may proceed to remove the materials using the following method:

15.1.2 Wet down work area. Begin removal of asbestos-containing materials. Make sure the materials are wet during disturbance activities. Contractor shall take measures to control dust by misting the air and lightly wetting material as it is removed. Remove debris down to the concrete slab.

15.1.3 Remove materials in sections small enough to place into 6-mil clear poly bags and goosenecked.

15.1.4 Ensure that all waste containers are clean of dust and residue as they are removed from the work area. Dispose of floor tile waste as non-hazardous asbestos waste. If a buffer is used to remove floor tile mastic the waste shall be placed in a metal drum and disposed of as Hazardous Asbestos Waste. Give copies of waste manifests to ACC or Shasta County Representative.

15.1.5 Inspect all construction systems to determine if there are signs of dust or debris. If present, clean all constructions systems of debris. Notify Consultant when final cleaning is complete for a visual inspection.

15.1.6 Once the work area has passed air testing the containment and signs can be removed.

15.2 Removal of Trace-asbestos drywall and joint compound and associated texturing compound

15.2.1 Set up work area isolation and ventilation of the work area in accordance to Section 6.0. If the Demolition Contractor is demolishing the building with the drywall in place the Demolition Contractor shall have a C-21 and C-22 Contractor's License. Contractor removing asbestos only shall have a C-22 Asbestos License. Contractor demolishing the building only shall have a C-21 Demolition License. Contractor shall install containment around the work area. Contractor shall meet State Storm Water Requirements. Upon approval of the work area by the Consultant, Contractor may proceed to remove the materials using the following method:

15.2.2 Wet down work area. Begin removal of asbestos materials and debris. Make sure the materials are wet during disturbance activities. Contractor shall take measures to control dust by misting the air and lightly wetting material as it is removed. An active fire hose will be required for each excavator during demolition of the building. Remove debris down to the concrete slab. Remove debris that is off the slab around the perimeter of the building.

15.2.3 Remove materials in sections small enough to place into 10-mil lined dumpster or end dump. All waste shall be burrito wrapped and duct taped so that the waste container is leak tight. If drywall is removed inside negative pressure containment the waste shall be disposed of in 6-mil poly bags and goosenecked

15.2.4 Ensure that all waste containers are clean of dust and residue as they are removed from the work area. Dispose of all waste as non-hazardous asbestos waste. Contractor shall provide letter from landfill that they will accept the waste. Give copies of waste manifests to ACC or Shasta County Representative.

15.2.5 Inspect all construction systems to determine if there are signs of dust or debris. If present, clean all constructions systems of debris. Notify Consultant when final cleaning is complete for a visual inspection.

15.2.6 Once the work area has passed visual inspection the barrier tape and signs can be removed.

15.3 Removal of asbestos-containing ceramic tile mastic.

15.3.1 Set up work area isolation and ventilation of the work area in accordance to Section 6.0. Contractor shall install barrier tape and warning signs around the work areas. Contractor shall meet State Storm Water Requirements Upon approval of the work area by the Consultant, Contractor may proceed to remove the materials using the following method:

15.3.2 Wet down work area. Begin removal of asbestos-containing materials. Make sure the materials are wet during disturbance activities. Contractor shall take measures to control dust by misting the air and lightly wetting material as it is removed. Remove debris down to the concrete slab.

15.3.3 Remove materials in sections small enough to place into 6-mil clear poly bags and goosenecked.

15.3.4 Ensure that all waste containers are clean of dust and residue as they are removed from the work area. Dispose of ceramic tile mastic as non-hazardous asbestos waste. Give copies of waste manifests to ACC or Shasta County Representative.

15.3.5 Inspect all construction systems to determine if there are signs of dust or debris. If present, clean all constructions systems of debris. Notify Consultant when final cleaning is complete for a visual inspection.

15.3.6 Once the work area has passed air testing the containment and signs can be removed.

15.4 Removal of asbestos-containing window putty

15.4.1 Set up work area isolation and ventilation of the work area in accordance to Section 6.0. Contractor shall install barrier tape and warning signs around the work areas. Contractor shall meet State Storm Water Requirements Upon approval of the work area by the Consultant, Contractor may proceed to remove the materials using the following method:

15.4.2 Wet down work area. Begin removal of asbestos-containing materials. Make sure the materials are wet during disturbance activities. Contractor shall take measures to control dust by misting the air and lightly wetting material as it is removed. Remove debris down to the concrete slab.

15.4.3 Remove materials in sections small enough to place into 6-mil clear poly bags and goosenecked.

15.4.4 Ensure that all waste containers are clean of dust and residue as they are removed from the work area. Dispose of window putty as non-hazardous asbestos waste. If the window putty is made friable during removal it shall be disposed of as Hazardous Asbestos Waste. Give copies of waste manifests to ACC or Shasta County Representative.

15.4.5 Inspect all construction systems to determine if there are signs of dust or debris. If present, clean all constructions systems of debris. Notify Consultant when final cleaning is complete for a visual inspection.

15.4.6 Once the work area has passed air testing the containment and signs can be removed.

15.5 Removal of asbestos-containing roofing

15.5.1 Set up work area isolation and ventilation of the work area in accordance to Section 6.0. Contractor shall install barrier tape and warning signs around the work areas. Contractor shall install drop cloths around building. Weigh down drop cloths with concrete blocks or 2 x 4 lumber Tree and bush trimming shall be the responsibility of the Contractor. Contractor shall meet State Storm Water Requirements Upon approval of the work area by the Consultant, Contractor may proceed to remove the materials using the following method:

15.5.2 Wet down work area. Begin removal of asbestos-containing materials. Make sure the materials are wet during disturbance activities. Contractor shall take measures to control dust by misting the air and lightly wetting material as it is removed. Remove debris down to the concrete slab.

15.5.3 Remove materials in sections small enough to place into 6-mil clear poly bags and goosenecked.

15.5.4 Ensure that all waste containers are clean of dust and residue as they are removed from the work area. Dispose of roofing as non-hazardous asbestos waste. If the roofing is made friable during removal it shall be disposed of as Hazardous Asbestos Waste. Give copies of waste manifests to ACC or Shasta County Representative.

15.5.5 Inspect all construction systems to determine if there are signs of dust or debris. If present, clean all constructions systems of debris. Notify Consultant when final cleaning is complete for a visual inspection.

15.5.6 Once the work area has passed air testing the containment and signs can be removed.

15.6 Removal of asbestos-containing pipe insulation or elbows

15.6.1 Set up work area isolation and ventilation of the work area in accordance to Section 6.0. Contractor shall install barrier tape and warning signs around the work areas. Contractor shall meet State Storm Water Requirements Upon approval of the work area by the Consultant, Contractor may proceed to remove the materials using the following method:

15.6.2 Wet down work area. Begin removal of asbestos-containing materials. Make sure the materials are wet during disturbance activities. Contractor shall take measures to control dust by misting the air and lightly wetting material as it is removed. Remove debris down to the concrete slab.

15.6.3 Remove materials in sections small enough to place into 6-mil clear poly bags and goosenecked.

15.6.4 Ensure that all waste containers are clean of dust and residue as they are removed from the work area. Dispose of pipe insulation as hazardous asbestos waste. Give copies of waste manifests to ACC or Shasta County Representative.

15.6.5 Inspect all construction systems to determine if there are signs of dust or debris. If present, clean all constructions systems of debris. Notify Consultant when final cleaning is complete for a visual inspection.

15.6.6 Once the work area has passed air testing the containment and signs can be removed.

15.7 Removal of asbestos-containing fire doors

15.7.1 Set up work area isolation and ventilation of the work area in accordance to Section 6.0. Contractor shall install barrier tape and warning signs around the work areas. Contractor shall meet State Storm Water Requirements Upon approval of the work area by the Consultant, Contractor may proceed to remove the materials using the following method:

15.7.2 Wet down work area. Begin removal of asbestos-containing materials. Make sure the materials are wet during disturbance activities. Contractor shall take measures to control dust by misting the air and lightly wetting material as it is removed. Remove debris down to the concrete slab.

15.7.3 Remove doors at hinges and wrap with two layers of 6-mil poly. Seal with duct tape. Install hazardous waste bag on outside of door. Install generator sticker on outside of bag.

15.7.4 Ensure that all waste containers are clean of dust and residue as they are removed from the work area. Dispose of fire doors as hazardous asbestos waste. Give copies of waste manifests to ACC or Shasta County Representative.

15.7.5 Inspect all construction systems to determine if there are signs of dust or debris. If present, clean all constructions systems of debris. Notify Consultant when final cleaning is complete for a visual inspection.

15.7.6 Once the work area has passed air testing the containment and signs can be removed.

END OF APPENDIX B