

Solar Panel Project at the Caltrans 34th Street Equipment Shop

Located at 1805 34th Street in Sacramento County, California

03-SAC L-5505 EA 03-0AA044

(E-FIS 0000001248)

Initial Study with Proposed Negative Declaration



Prepared by the
State of California Department of Transportation



May 2011

General Information About This Document

What's in this document?

The California Department of Transportation (Caltrans) has prepared this Initial Study, which examines the potential environmental impacts of the proposed solar power generation and roof repair project located in Sacramento, California. The document tells you why the project is being proposed, what alternatives we have considered for the project, how the existing environment could be affected by the project, the potential impacts, and the proposed avoidance and minimization measures.

What should you do?

- Please read this Initial Study. Additional copies are available along at the Sacramento Central Library, 828 I Street, Sacramento, CA 95816; and the McKinley Branch Library, 601 Alhambra Avenue, Sacramento, CA 95816.
- The document is also available at the following website:
<http://www.dot.ca.gov/dist3/departments/envinternet/envdoc.htm>.
- We welcome your comments. If you have any comments regarding the proposed project, please send your written comments to Caltrans at the following address:

Jeremy Ketchum, Senior Environmental Planner
Office of Environmental Management
California Department of Transportation
2379 Gateway Oaks Drive, Suite 150, Sacramento, CA 95833

Or submit comments via email to: **Jeremy_Ketchum@dot.ca.gov**

Submit comments by the deadline: June 7, 2011

What happens next?

After comments are received from the public and the reviewing agencies, Caltrans may (1) give environmental approval of the proposed project, (2) conduct additional environmental studies, or (3) abandon the project. If the project is given environmental approval and funding is appropriated, Caltrans could proceed with design and construct all or part of the project.

For individuals with sensory disabilities, this document can be made available in Braille, large print, audiocassette or computer disk. To obtain a copy in one of these alternate formats, please call or write: Mark Dinger, Public Information Officer, Caltrans - District 3, 703 B Street, Marysville, CA 95901, (530) 741-4572 (voice phone) or (530) 741-4509 (TTY).

SCH:
03-SAC, L5501
EA: 03-0AA044

Solar Panel (CREB) Project at the Caltrans Headquarters' 34th Street Equipment Shop Facility

1805 34th Street in Sacramento County
03-SAC, L-5505
EA: 03-0AA044
(E-FIS 0000001248)

Initial Study with Proposed Negative Declaration

Submitted Pursuant to: (State) Division 13, California Resources Code

THE STATE OF CALIFORNIA
Department of Transportation

5/13/11
Date of Approval


John Webb, Chief
North Region Environmental Services
California Department of Transportation

Proposed Negative Declaration

Pursuant to: Division 13, Public Resources Code

Project Description

The California Department of Transportation (Caltrans) proposes to make roof repairs and then install a photovoltaic (PV) power generation system on top of two buildings at their HQ 34th Maintenance Station (Equipment Shop and Engineering Office) located at 1805 34th Street in Sacramento, California. This endeavor is part of an overall Pilot project to comply with the Clean Renewable Energy Bonds (CREB) program and the Governor's Executive Order S-20-04. The work will require some vegetation removal and installing PV panels onto the rooftops of the Equipment Shop and the Engineering Office. The installation will use either a self-ballasted (counter balancing) system or by drilling holes in the walls and then using supports to affix the PV panels onto the rooftop. Near the two buildings an electrical inverter machine will be installed, and some power conduit wire will require re-routing. No earthwork or trench digging is required for this project, and some minor vegetation removal may also be required. The 34th Street Equipment Shop location is within Caltrans right of way. This project will receive state-only funding and is therefore subject to the California Environmental Quality Act (CEQA) and the PRC 5024.

Determination

Caltrans has prepared an Initial Study for this project and, pending public review and comments, expects to determine from this study that the proposed project would not have a significant effect on the environment for the following reasons:

- The proposed project would have minimal or no effect on aesthetics, agricultural resources, air quality, geology/soils, land use and planning, mineral resources, noise, population/housing, public services, recreation, transportation, traffic patterns, utilities, and water quality.
- In addition the proposed project would have no significant effect on any hazardous waste or material and would have no significant effect on cultural resources. The project will be completed in a manner consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties (Standards); therefore, Caltrans has determined that a finding of "no substantial adverse change" under CEQA is appropriate for this project.
- No mitigation measures are required.

Date of Approval

John Webb, Chief
North Region Environmental Services
California Department of Transportation

DRAFT

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DRAFT

Initial Study

Project Title

Solar Panel Project in District 3, at the Caltrans Headquarters' 34th Street Maintenance Facility

Lead Agency Name and Address

California Department of Transportation (Caltrans)
2379 Gateway Oaks Drive, Suite 150
Sacramento, CA 95833

Contact Person

Jeremy Ketchum, Senior Environmental Planner
Environmental Management Branch S1
(916) 274-0621

Project Location

The proposed project is located in District 3 at HQ's 34th Street Maintenance Station at the Equipment Shop Building and Engineering Office Building, located at 1805 34th Street in Sacramento, California. The project is located on 34th Street near the intersection of Stockton Boulevard and R Streets.

Project Sponsor's Name and Address

California Department of Transportation (Caltrans)
John Webb, Chief of Environmental Services - South
703 B St
Marysville, CA 95901

Purpose and Need

The California Department of Transportation (Caltrans) proposes to repair the rooftop and then install a photo voltaic (PV) power generation system on top of two buildings at their HQ's' Maintenance Station's Equipment Shop Building and the Engineering Office Building. The roof improvement work will take place on top of the Equipment Shop and will consist of replacing rusted gutter sections and then either repairing the roof or partially replacing some sections that are currently causing leaks during the rainy season. The PV system will provide solar electrical power to the facility in unison with the utility power. Caltrans has committed to the Clean Renewable Energy Bond (CREB) program, and this project is one of several projects in District 3 that will install (PV) power generation systems in various state-owned buildings within the district. The purpose of this project is to provide clean, renewable energy and demonstrate Caltrans' commitment to California's Clean Renewable Energy Bond (CREB) program and the Governor Executive Order (E.O.) S-20-04. The E.O. states that all state-owned facilities are to take measures to reduce grid-based energy purchases by the year 2015. This project proposes to place photovoltaic panels on the roof of the 34th Street Equipment Shop building and the Engineering Office and to tie the electrical output of the system into the local electrical utility.

Alternatives

There are two alternatives being studied, the “No Build” alternative and the build alternative, which is described below.

Description of Project

The proposed project is located at Caltrans’ HQ 34th Street Maintenance Station facility (Bridge No. 22-5505) at 1805 34th Street in Boulevard in Sacramento, California. The maintenance facility is comprised of several buildings, and the project proposes to install PV panels on the rooftops of the Administrative/Equipment Shop Building and on a smaller detached Engineering Office Building within the maintenance facility.

First, the gutter replacement and the roof repair or partial roof replacement will occur at the Equipment Shop. Then the project proposes to install approximately 11,125 total square feet of PV panels onto the rooftop of the Equipment Shop building itself and to install approximately 1,200 sq feet onto the rooftop of the Engineering Office building, for a total of approximately 12,325 square feet. The panels will be placed flat and oriented south for maximum sun exposure and are connected to each other by wires in series and in parallel. Specific work involves the following: installing PV panels on the roof of the two buildings by using two methods: (1) using a self-ballasted system that holds it on place on the rooftop and then gets connected to existing structural members, or (2) by having roof penetrations at locations where the power load can be transferred to structural members. Locations for roof penetration were selected after the property was inspected for proposed loads by a structural engineer in January 2010. Conduit wires will be required to connect the PV panels to the various structural members. The conduit wires that need to be installed on the roof will first be mounted to supports that do not penetrate the roof. Then the supports with conduit wire will require small holes in the existing structural members just below the roof. Several panels (14 + or -) are in a series (a string) and are wired to an electrical combiner box that combines several strings in parallel. Next, from the combiner box, conduit and wire is installed so that power can go to an inverter, which changes the power from DC to AC and matches the utility power frequency. The inverter will be placed adjacent to the detached Engineering Office building and will connect to an existing main electrical service box. From the inverter, the power is fed into an existing electrical main switchboard (MSB). No trench work or other earth work is required for the PV installation, and the conduit wire work will be routed.

Additionally, both the Administration/Equipment Shop and the Engineering Office were originally constructed in the 1920’s (with building modifications added in the 1940’s and 1950’s) and are listed as historic properties on the National Register of Historic Places. The project’s scope and plans include measures to minimize impacts to these two historic structures.

Purpose and Need

The purpose and need of the project is to comply with E.O. S-20-04, which states that all state-owned facilities must take measures to reduce their grid utility power by 20% by the year 2015 (using a baseline year of 2003) and use clean, renewable energy. The goal of the proposed project is to reduce the Equipment Shop's use of conventional electric utility power by 20% by installing the PV power system and to provide electrical power to the facility in unison with the utility power. Installation of the PV power system will employ renewable solar energy and will save utility cost.

Surrounding Land Uses and Setting

At the project location the surrounding properties are mixed commercial and industrial uses.

Permits and Approvals Needed

No environmental permits are required to construct the project. Additionally, the project is consistent with the Sacramento County General Plan

Figure 1 - Project Vicinity Map

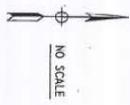
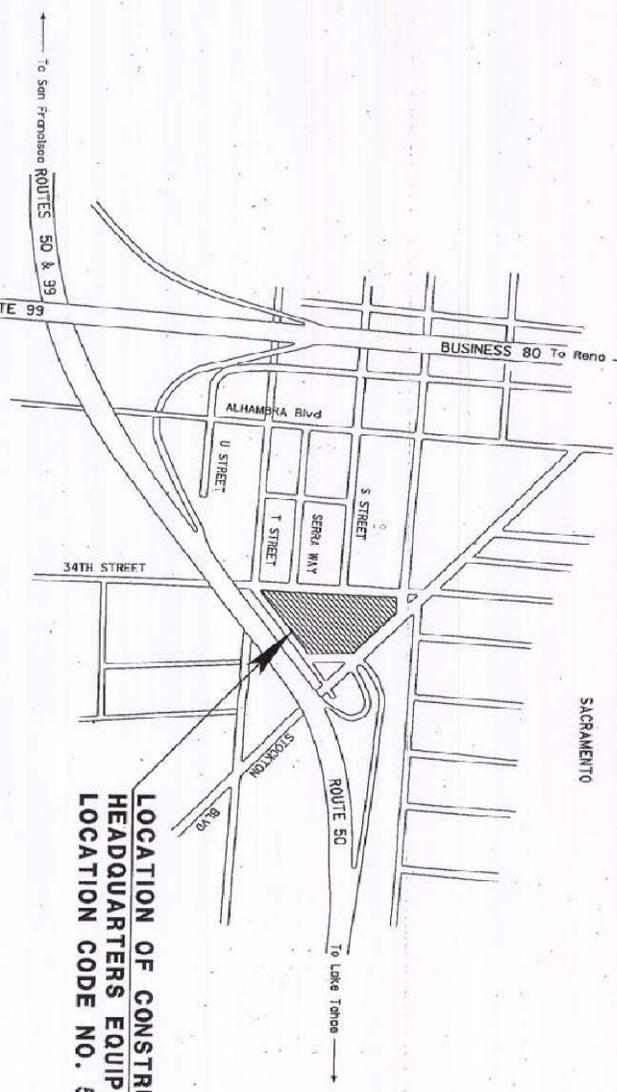
DESIGN ENGINEER	PROJECT MANAGER
ALAN TORRES	CLARK PERRY

INDEX OF PLANS

SHEET NO.	DESCRIPTION
1	TITLE AND LOCATION MAP
2	STRUCTURE PLANS
3-7	GENERAL PLAN AND LEGEND ELECTRICAL PLANS

THE STANDARD PLANS LIST APPLICABLE TO THIS CONTRACT IS INCLUDED IN THE NOTICE TO BIDDERS AND SPECIAL PROVISIONS BOOK.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
PROJECT PLANS FOR BUILDING CONSTRUCTION
IN SACRAMENTO COUNTY
IN SACRAMENTO
AT THE
HEADQUARTERS OFFICE OF EQUIPMENT
AT
34TH STREET AND STOCKTON BOULEVARD
 TO BE SUPPLEMENTED BY STANDARD PLANS DATED MAY 2006
 SACRAMENTO

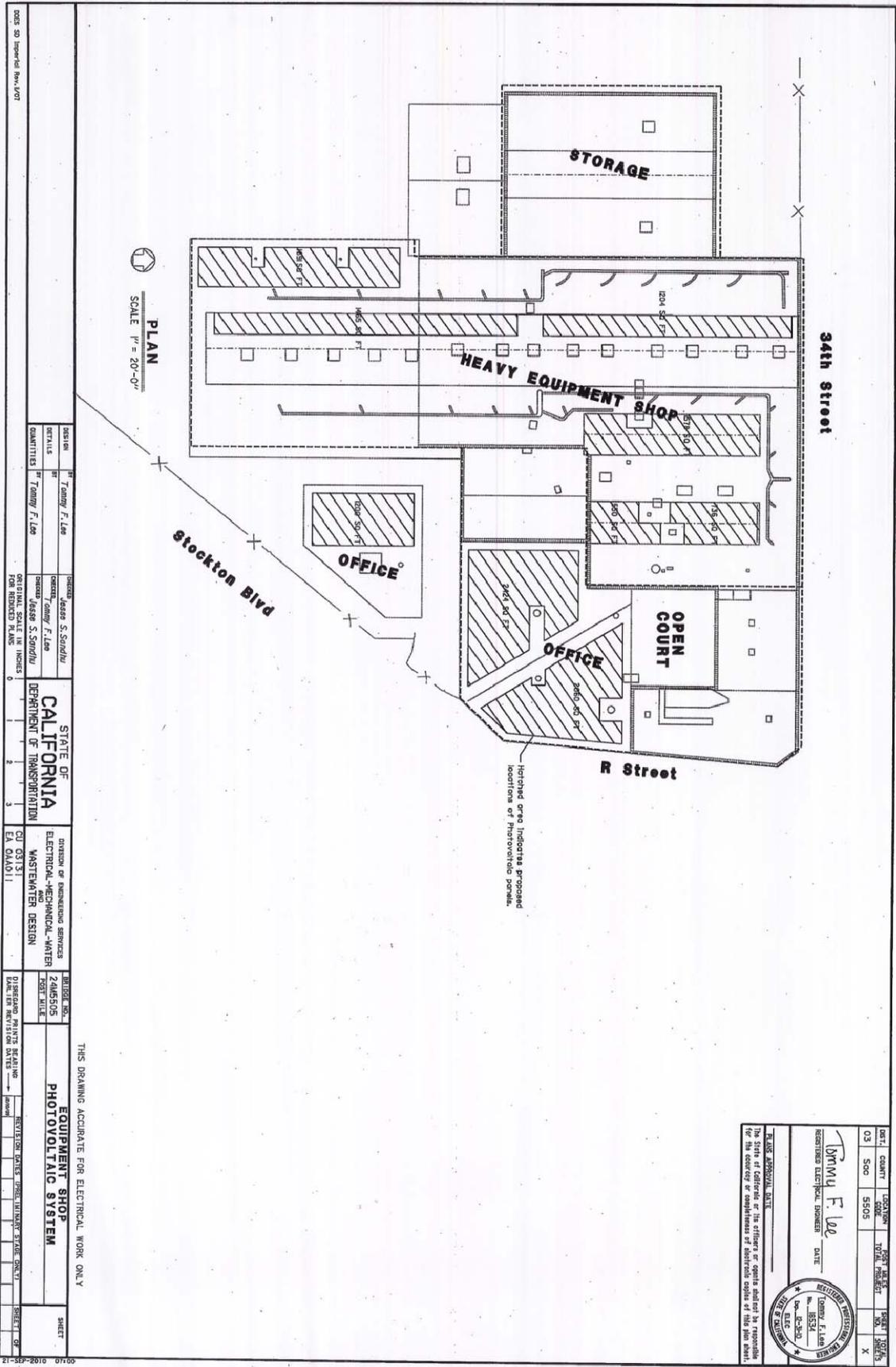


DIST	COUNTY	LOCATION	POST MILE TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	SOC	5505		1	7

CLAIMING TITLE FOR MATERIAL APPROVED
 I hereby certify that the above described material was furnished to me by the contractor named herein and that it is the property of the contractor named herein and is not the property of the State of California.
 Witness my hand and seal this _____ day of _____, 2006.
 PROJECT ENGINEER
 PHOTODUPLICATION SYSTEMS
 0301 FILE # 01-35-14-0005

Thomas F. We...
 PROJECT ENGINEER
 REGISTERED PROFESSIONAL ENGINEER
 CIVIL
 No. 32148
 State of California
 CONTRACT NO. 03-0A A 07 4

Figure 2 - Location Map



DESIGN: 30 Imperial Blvd., 407		DATE: 03/13/11	
DESIGNER:	PROJECT:	DATE:	SCALE:
T. Tammy F. Lee	Jessie S. Sandoz	03/13/11	1/4" = 20'-0"
DETAILS:	PROJECT:	DATE:	SCALE:
T. Tammy F. Lee	Jessie S. Sandoz	03/13/11	1/4" = 20'-0"
QUANTITIES:	PROJECT:	DATE:	SCALE:
T. Tammy F. Lee	Jessie S. Sandoz	03/13/11	1/4" = 20'-0"
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS			
STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION DIVISION OF ENGINEERING SERVICES ELECTRICAL-MECHANICAL-WATER WASTEWATER DESIGN			
PROJECT NO. 03-0AA044			
PROJECT NAME: EQUIPMENT SHOP PHOTOVOLTAIC SYSTEM			
SHEET NO. 12 OF 12			

REGISTERED ELECTRICAL ENGINEER

T. Tammy F. Lee

DATE: 03/13/11

REGISTERED PROFESSIONAL ENGINEER

Jessie S. Sandoz

DATE: 03/13/11

THIS DRAWING ACCURATE FOR ELECTRICAL WORK ONLY

THE STATE OF CALIFORNIA OR THE OFFICERS OR SPECIAL AGENTS IS RESPONSIBLE FOR THE CORRECTNESS OR COMPLETENESS OF ALL INFORMATION CONTAINED HEREIN.

Figure 3 - Electrical Plans EE-3

CEQA Environmental Checklist

03-Sac-L-5505

03-0AA044

Dist.-Co.-Rte.

P.M/P.M.

E.A.

This checklist identifies physical, biological, social and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the projects indicate no impacts. A NO IMPACT answer in the last column reflects this determination. Where there is a need for clarifying discussion, the discussion is included either following the applicable section of the checklist or is within the body of the environmental document itself. The words "significant" and "significance" used throughout the following checklist are related to CEQA, not NEPA, impacts. The questions in this form are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
I. AESTHETICS: Would the project:				
a) Have a substantial adverse effect on a scenic vista	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

“No impact” determinations check marked in the above section are based on the Visual Impact Assessment Memo of March 3, 2011.

Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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II. AGRICULTURE AND FOREST RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Result in the loss of forest land or conversion of forest land to non-forest use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

“No impact” determinations check marked in the above section are based on the project location and scope.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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III. AIR QUALITY: Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Conflict with or obstruct implementation of the applicable air quality plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Expose sensitive receptors to substantial pollutant concentrations? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

“No impact” determinations check marked in the above section are based on the Air Quality Analysis of July 22, 2009.

IV. BIOLOGICAL RESOURCES: Would the project:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

“No impact” determinations check marked in the above section are based on the Natural Environmental Study (NES) Memo of October 22, 2009.

V. CULTURAL RESOURCES: Would the project:

a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

“Less than significant impact” and “No impact” determinations check marked in the above section are based on the Archaeological Survey Report (ASR) of October 1, 2009 and the Historic Resources Compliance Report (HRCR) of February 28, 2011.

VI. GEOLOGY AND SOILS: Would the project:

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

“No impact” determinations check marked in the above section are based on the project location and scope.

Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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VII. GREENHOUSE GAS EMISSIONS: Would the project:

- a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?
- b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

An assessment of the greenhouse gas emissions and climate change is included in the body of environmental document. While Caltrans has included this good faith effort in order to provide the public and decision-makers as much information as possible about the project, it is Caltrans determination that in the absence of further regulatory or scientific information related to GHG emissions and CEQA significance, it is too speculative to make a significance determination regarding the project's direct and indirect impact with respect to climate change. Caltrans remains firmly committed to implementing measures to help reduce the potential effects of the project. These measures are outlined in the body of the environmental document.

VIII. HAZARDS AND HAZARDOUS MATERIALS: Would the project:

- a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
- b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?
- c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
- d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?
- e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?
- f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?
- g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
- h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

“No impact” and “Less than significant determinations check marked in the above section are based on the Hazardous Waste Initial Site Assessment of March 3, 2010.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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IX. HYDROLOGY AND WATER QUALITY: Would the project:

a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

“No impact” determinations check marked in the above section are based on the Water Quality Assessment of July 15, 2009.

Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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X. LAND USE AND PLANNING: Would the project:

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Physically divide an established community? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Conflict with any applicable habitat conservation plan or natural community conservation plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

“No impact” determinations check marked in the above section are based on the project location and scope.

XI. MINERAL RESOURCES: Would the project:

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

“No impact” determinations check marked in the above section are based on the project location and scope.

XII. NOISE: Would the project result in:

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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 expose people residing or working in the project area to excessive noise levels? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

“No impact” determinations check marked in the above section are based on the project location and scope.

XIII. POPULATION AND HOUSING: Would the project:

a) Induce substantial 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)?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

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

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

“No impact” determinations check marked in the above section are based on the project location and scope.

XIV. PUBLIC SERVICES:

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

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

Fire protection?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

Police protection?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

Schools?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

Parks?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

Other public facilities?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

“No impact” determinations check marked in the above section are based on the project location and scope.

Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
--------------------------------	---------------------------------------	------------------------------	-----------

XV. RECREATION:

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

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

“No impact” determinations check marked in the above section are based on the project location and scope.

XVI. TRANSPORTATION/TRAFFIC: Would the project:

a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

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

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

e) Result in inadequate emergency access?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

f) Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

“No impact” determinations check marked in the above section are based on the project location and scope.

XVII. UTILITIES AND SERVICE SYSTEMS: Would the project:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

“No impact” determinations check marked in the above section are based on the project location and scope.

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

“No impact” determinations check marked in the above section are based on the project location and scope.

AFFECTED ENVIRONMENT, ENVIRONMENTAL CONSEQUENCES, AND AVOIDANCE MEASURES

CULTURAL RESOURCES

Regulatory Setting

“Cultural resources” as used in this document refers to all historical and archaeological resources, regardless of significance. Laws and regulations dealing with cultural resources include The California Environmental Quality Act (CEQA), as well as California Public Resources Code (PRC) Section 5024.1, which established the California Register of Historical Resources. PRC Section 5024 requires state agencies to identify and protect state-owned resources that meet National Register of Historic Places listing criteria. It further specifically requires the Department to inventory state-owned structures in its Right of Way. Sections 5024(f) and 5024.5 require state agencies to provide notice to and consult with the State Historic Preservation Officer (SHPO) before altering, transferring, relocating, or demolishing state-owned historical resources that are listed on or are eligible for inclusion in the National Register or are registered or eligible for registration as California Historical Landmarks. SHPO has a mandatory 30-day review period to respond with a concurrence or non-concurrence with the recommended findings of the cultural resource documents.

Affected Environment

Consultation and identification efforts for the proposed project consisted of a review of the following sources: The National Register of Historic Places, California Register of Historic Resources, California Historical Landmarks, and the State Historic Resources Commission. The review of these sources resulted in the identification of one previously evaluated historic property within the Project Area Limits. The Caltrans Equipment Headquarters Yard at 34th Street and Stockton Boulevard in Sacramento, California was determined a significant historical resource under CEQA and was listed in the Master List of Historical Resources in August 2008. No other archaeological or architectural resources were identified within the Project Area Limits.

Environmental Consequences/Avoidance and Minimization Measures

The project will not alter character-defining features of the Caltrans Equipment Headquarters Yard. Consequently, Caltrans did not consult with the State Historical Building Safety Board and it was not necessary to apply the California Historical Building Code.

The project will be completed in a manner consistent with the Secretary of the Interior’s Standards for the Treatment of Historic Properties (Standards); therefore, Caltrans has determined that a finding of “no substantial adverse change” under CEQA is appropriate for this project. A description of the use of the Standards is included on pages 2-3 of the HRCR.

Under PRC Section 5024.5(a), Caltrans has determined that there is no adverse effect to the Caltrans Equipment Headquarters Yard and provided the SHPO with notice and summary of the proposed project for

review and comment. The SHPO received the HRCR on February 28, 2011, and at the time of this Draft Initial Study, it has not responded. Therefore, Caltrans has complied with PRC Section 5024.

The following avoidance and minimization measure will minimize impacts to architectural resources:

- The conduit wires that need to be installed on the roof will be mounted first to supports that do not penetrate the roof. The supports with conduit wire will require small holes in the existing structural members just below the roof.

HAZARDOUS WASTE

Regulatory Setting

Hazardous materials and hazardous wastes are regulated by many state and federal laws. These include not only specific statutes governing hazardous waste, but also a variety of laws regulating air and water quality, human health and land use.

The primary federal laws regulating hazardous wastes/materials are the Resource Conservation and Recovery Act of 1976 (RCRA) and the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA). The purpose of CERCLA, often referred to as Superfund, is to clean up contaminated sites so that public health and welfare are not compromised. RCRA provides for “cradle to grave” regulation of hazardous wastes. Other federal laws include:

- Community Environmental Response Facilitation Act (CERFA) of 1992
- Clean Water Act
- Clean Air Act
- Safe Drinking Water Act
- Occupational Safety and Health Act (OSHA)
- Atomic Energy Act
- Toxic Substances Control Act (TSCA)
- Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)

In addition to the acts listed above, Executive Order 12088, Federal Compliance with Pollution Control, mandates that necessary actions be taken to prevent and control environmental pollution when federal activities or federal facilities are involved.

Hazardous waste in California is regulated primarily under the authority of the federal Resource Conservation and Recovery Act of 1976, and the California Health and Safety Code. Other California laws that affect hazardous waste are specific to handling, storage, transportation, disposal, treatment, reduction, cleanup and emergency planning.

Worker health and safety and public safety are key issues when dealing with hazardous materials that may affect human health and the environment. Proper disposal of hazardous material is vital if it is disturbed during project construction.

Affected Environment

The "Cortese List" (required by Government Code Section 65926.5) contains information about contaminated properties. It is mandatory to check the Cortese list as part of the Preliminary Site Investigation, or initial screening, for all projects. A property's presence on the list has a bearing on the local permitting process as well as on compliance with CEQA. A search of hazardous waste databases determined that the Headquarters' 34th Maintenance station (which includes all buildings within the facility) is a site on the Cortese List for petroleum-contaminated groundwater. The contaminated groundwater is located about 25 feet below the ground surface, and currently there is clean-up remediation occurring at the facility consisting of a vapor extraction system. There are also several remediation monitoring wells located at the 34th Street Maintenance facility. This project will require no digging of trenches or other earthwork with this project.

The affected environment includes the Environmental Study Limit (ESL) that encompasses the perimeter around the Administration/Shop building and the detached Engineering Office at 1805 34th Street. The north boundary of the project is adjacent to R Street, the west boundary is adjacent to 34th Street, and the east boundary is adjacent to Stockton Boulevard, which runs diagonally.

The work scope for the proposed project will involve installing strings of PV panels on the rooftops using two methods: (1) some areas of the roof will require drilling small holes into the structural members below the roof and (2) other areas of the roof will use a self-ballasted rack system method that fastens to the rooftop (with counter balanced cement bricks) and does not penetrate the rooftop.

Environmental Consequences/Avoidance and Minimization Measures

Until fairly recently, the use of asbestos-containing materials (ACM) and lead-based paint were common practices employed in building construction and insulation. Lead and ACM are classified as hazardous materials and are subject to hazardous materials regulations and protocol. The U.S. Environmental

Protection Agency (EPA) banned lead-based paint in 1977¹, and it began limiting the use of asbestos in 1989.² Because the Administration/Equipment Shop and the Engineering Office are over 80 years old, it is very likely that there are ACMs and lead-based paint present in these two buildings.

Some of the PV panel installation for this project will require drilling into the wall; and while the disturbance is small, the potential exists for possible exposure to lead-containing paint for construction workers. Construction activities that disturb materials or paints containing any amount of lead are subject to certain requirements of the Cal/OSHA lead standard contained in Title 8, CCR, Section 1532.1.

Deteriorated paint is defined by Title 17, CCR, Division 1, Chapter 8, Section 35022 as a surface coating that is cracking, chalking, flaking, chipping, peeling, non-intact, failed, or otherwise separating from a compound. Intact lead-containing paint on a component is currently accepted by most landfill facilities; however, contractors are responsible for segregating and characterizing waste streams prior to disposal. The following Avoidance and Minimization Measures will apply to ensure the health and safety of construction workers and 34th Street Maintenance Station employees:

- Inclusion of Non-Standard Specification (NSSP) for lead, which will include a Lead Compliance Plan (LCP) that will address the proper handling, treatment, and disposal of any lead-containing material.
- Inclusion of a NSSP for asbestos, which will include an Asbestos Compliance Plan (ACP) that will address the proper handling and disposal of any ACMs. Later during the Plans, Specifications, and Estimate (PS&E) phase of the project, the Caltrans Office of Hazardous Waste will submit the appropriate NSSPs for ACM and the Lead Compliance Plan to the Caltrans Office of Engineering Services for approval and inclusion into the Contractor's Specifications and Cost Estimate.

With the inclusion of the avoidance and minimization measures above, the project is not anticipated to result in any substantial impacts. Therefore, the project would not be expected to contribute to a cumulative impact.

CLIMATE CHANGE (FOR CEQA)

Regulatory Setting

While climate change has been a concern since at least 1988, as evidenced by the establishment of the United Nations and World Meteorological Organization's Intergovernmental Panel on Climate Change (IPCC), the efforts devoted to greenhouse gas (GHG) emissions reduction and climate change research and policy have increased dramatically in recent years. These efforts are primarily concerned with the emissions human activity-related GHG, including carbon dioxide (CO₂), methane, nitrous oxide, tetrafluoromethane, hexafluoroethane, sulfur hexafluoride, HFC-23 (fluoroform), HFC-134a (s, s, s, 2 –tetrafluoroethane), and HFC-152a (difluoroethane).

In 2002, with the passage of Assembly Bill 1493 (AB 1493), California launched an innovative and proactive approach to dealing with GHG emissions and climate change at the state level. Assembly Bill 1493 requires the California Air Resources Board (CARB) to develop and implement regulations to reduce automobile and light truck GHG emissions. These stricter emissions standards were designed to apply to automobiles and light trucks beginning with the 2009-model year; however, in order to enact the standards California needed a waiver from the U.S. Environmental Protection Agency (EPA). The waiver was denied by EPA in December 2007 (See *California v. Environmental Protection Agency*, 9th Cir. Jul. 25, 2008, No. 08-70011). However, on January 26, 2009, it was announced that EPA will reconsider their decision regarding the denial of California's waiver. On May 18, 2009, President Obama announced the enactment of a 35.5 mpg fuel economy standard for automobiles and light duty trucks which will take effect in 2012. This standard is the same standard that was proposed by California; therefore, the California waiver request has been shelved.

On June 1, 2005, Governor Arnold Schwarzenegger signed Executive Order S-3-05. The goal of this Executive Order is to reduce California's GHG emissions to: 1) 2000 levels by 2010, 2) 1990 levels by the year 2020 and 3) 80 percent below the 1990 levels by the year 2050. In 2006, this goal was further reinforced with the passage of Assembly Bill 32 (AB 32), the Global Warming Solutions Act of 2006. AB 32 sets the same overall GHG emissions reduction goals while further mandating that CARB create a plan, which includes market mechanisms, and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases." Executive Order S-20-06 further directs state agencies to begin implementing AB 32, including the recommendations made by the State's Climate Action Team.

With Executive Order S-01-07, Governor Schwarzenegger set forth the low carbon fuel standard for California. Under this executive order, the carbon intensity of California's transportation fuels is to be reduced by at least 10 percent by 2020.

Climate change and GHG reduction is also a concern at the federal level; however, at this time, no legislation or regulations specifically addressing GHG emissions reductions and climate change have been enacted. California, in conjunction with several environmental organizations and several other states, sued to force the U.S. Environmental Protection Agency (EPA) to regulate GHG as a pollutant under the Clean Air Act (Massachusetts vs. Environmental Protection Agency et al., 549 U.S. 497 (2007)). The court ruled that GHG does fit within the Clean Air Act’s definition of a pollutant, and that the EPA does have the authority to regulate GHG. Despite the Supreme Court ruling, there are no promulgated federal regulations to date limiting GHG emissions.

According to *Recommendations by the Association of Environmental Professionals on How to Analyze GHG Emissions and Global Climate Change in CEQA Documents* (March 5, 2007), an individual project does not generate enough GHG emissions to significantly influence global climate change. Rather, global climate change is a cumulative impact. This means that a project may participate in a potential impact through its incremental contribution combined with the contributions of all other sources of GHG. In assessing cumulative impacts, it must be determined if a project’s incremental effect is “cumulatively considerable.” See CEQA Guidelines sections 15064(i) (1) and 15130. To make this determination, the incremental impacts of the project must be compared with the effects of past, current, and probable future projects. To gather sufficient information on a global scale of all past, current, and future projects in order to make this determination is a difficult, if not impossible, task. As part of its supporting documentation for the Draft Scoping Plan, CARB recently released an updated version of the GHG inventory for California (June 26, 2008). Shown below is a graph from that update which shows the total GHG emissions for California for 1990, 2002-2004 average, and 2020 projected if no action is taken.

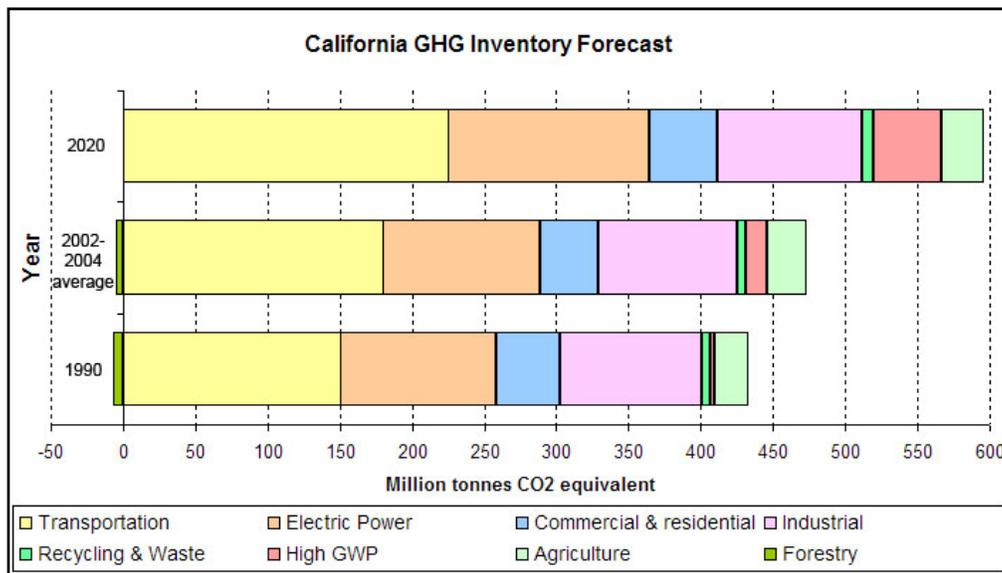


FIGURE 2: CALIFORNIA GREENHOUSE GAS INVENTORY
 Taken from : <http://www.arb.ca.gov/cc/inventory/data/forecast.htm>

Caltrans and its parent agency, the Business, Transportation, and Housing Agency, have taken an active role in addressing GHG emission reduction and climate change. Recognizing that 98 percent of California's GHG emissions are from the burning of fossil fuels and 40 percent of all human made GHG emissions are from transportation (see Climate Action Program at Caltrans, December 2006). Caltrans has created and is implementing the Climate Action Program at Caltrans that was published in December 2006. This document can be found at: <http://www.dot.ca.gov/docs/ClimateReport.pdf>

Project Analysis

This project proposes to install both a self-ballasting system of PV panels onto the rooftops of the Administration/Equipment Shop Building and at the Engineering Office at the Caltrans' 34th Street Maintenance facility. The project will not increase traffic or change long-term traffic. There will be no increase in operational GHG emissions occurring from the project. The project will supplement the existing grid-based electricity with solar-powered electricity. Adding solar-based power will help operate the building's electrical heating, air conditioning, and ventilation (HVAC) system, as well as help power the test equipment for both the Administration-Equipment Shop Building and the Engineering Office Building. Adding solar-based electricity will increase the energy efficiency of these buildings and will reduce their operational costs. The project will help play a beneficial role in California's economy by saving money and using clean, renewable energy. Additionally, the project is compliant with two recent pieces of legislation that focus on energy use. Assembly Bill 32, or AB 32, (Nunez, Chapter 488, Statutes of 2006) was passed in 2006 by California State Legislature and Governor's Office to address greenhouse gas emissions. AB 32 requires "reductions in California's greenhouse gas emissions to 1990 levels by the year 2020 and to 80 percent below 1990 levels by 2050. Though not specifically mentioning buildings, increasing building energy efficiency is expected to play a significant role in meeting AB 32 goals." ¹ (Source: <http://www.energy.ca.gov/2008publications/CEC-400-2008-005/CEC-400-2008-005-CMF.PDF>)

As previously mentioned, the project is also compliant with Executive Order (E.O.) S-20-04, which Governor Arnold Schwarzenegger signed in December 2004. E.O. S-20-04 "set a goal of reducing energy use in state-owned buildings by 20 percent by 2015 (from a 2003 baseline) and encouraged cities, counties, schools, and the private sector to take all cost-effective measures to reduce building electricity use. This action built upon the state's strong history of energy efficiency efforts that have saved Californians and California businesses energy and money for decades. They are a cornerstone of greenhouse gas reduction efforts."² (Source: <http://www.energy.ca.gov/2010publications/CAT-1000-2010-005/CAT-1000-2010-005.PDF>)

Construction Emissions

GHG emissions for transportation projects can be divided into those produced during construction and those produced during operations. Construction GHG emissions include emissions produced as a result of

material processing, emissions produced by onsite construction equipment, and emissions arising from traffic delays due to construction. These emissions will be produced at different levels throughout the construction phase. Their frequency and occurrence can be reduced through innovations in plans and specifications and by implementing better traffic management during construction phases. In addition, with innovations such as longer pavement life, improved traffic management plans, and changes in materials, the GHG emissions produced during construction can be reduced to some degree by longer intervals between maintenance and rehabilitation events.

For this project, GHG emissions during construction would be unavoidable but temporary. Thus, construction related impacts on GHG would not be considered long-term. Caltrans BMPs to reduce GHG emissions during construction would include limiting one way traffic wait time to no more than 10 minutes (thereby reducing idle time).

AB 32 Compliance

Caltrans continues to be actively involved on the Governor’s Climate Action Team as CARB works to implement the Governor’s Executive Orders and help achieve the targets set forth in AB 32. Many of the strategies Caltrans is using to help meet the targets in AB 32 come from the California Strategic Growth Plan, which is updated each year. Governor Arnold Schwarzenegger’s Strategic Growth Plan calls for a \$238.6 billion infrastructure improvement program to fortify the state’s transportation system, education, housing, and waterways, including \$100.7 billion in transportation funding through 2016.¹ As shown in the figure below, the Strategic Growth Plan targets a significant decrease in traffic congestion below today’s level and a corresponding reduction in GHG emissions. The Strategic Growth Plan proposes to accomplish this decrease in traffic while accommodating growth in population and the economy. A suite of investment options has been created, when combined yield the promised reduction in congestion. The Strategic Growth Plan relies on a complete systems approach with a variety with strategies: system monitoring and evaluation, maintenance and preservation, smart land use and demand management, and operational improvements.

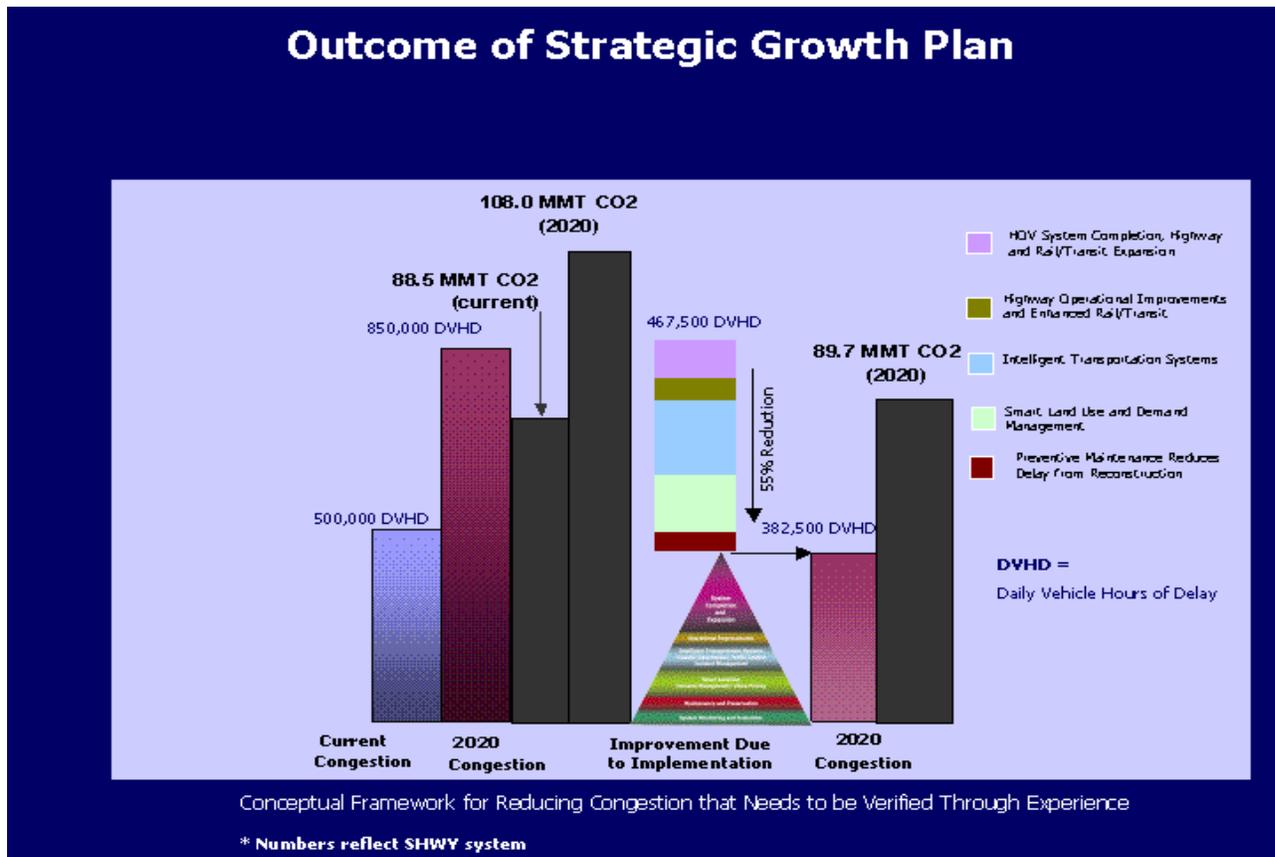


Figure 3: Outcome of Strategic Growth Plan

¹ Governor’s Strategic Growth Plan, Fig. 1 (<http://gov.ca.gov/pdf/gov/CSGP.pdf>)

As part of the Climate Action Program at Caltrans (December 2006, <http://www.dot.ca.gov/docs/ClimateReport.pdf>), Caltrans supports efforts to reduce vehicle miles traveled by planning and implementing smart land use strategies: job/housing proximity, developing transit-oriented communities, and high density housing along transit corridors. Caltrans is working closely with local jurisdictions on planning activities; however, Caltrans does not have local land use planning authority. Caltrans is also supporting efforts to improve the energy efficiency of the transportation sector by increasing vehicle fuel economy in new cars, light and heavy-duty trucks; Caltrans is accomplishing improvements by supporting on-going research efforts at universities, by supporting legislative efforts to increase fuel economy, and by its participation on the Climate Action Team. It is important to note, however, that the control of the fuel economy standards is held by EPA and CARB. Lastly, the use of alternative fuels is also being considered; the Department is participating in funding for alternative fuel research at the UC Davis.

The Climate Change Strategies table below summarizes the departmental and statewide efforts that Caltrans is implementing in order to reduce GHG emissions. For more detailed information about each strategy, please see Climate Action Program at Caltrans (December 2006). It is available at <http://www.dot.ca.gov/docs/ClimateReport.pdf>.

Climate Change Strategies

Strategy	Program	Partnership		Method/Process	Estimated CO ₂ Savings (MMT)	
		Lead	Agency		2010	2020
Smart Land Use	Intergovernmental Review (IGR)	Caltrans	Local Governments	Review and seek to mitigate development proposals	Not Estimated	Not Estimated
	Planning Grants	Caltrans	Local and regional agencies & other stakeholders	Competitive selection process	Not Estimated	Not Estimated
	Regional Plans and Blueprint Planning	Regional Agencies	Caltrans	Regional plans and application process	0.975	7.8
Operational Improvements & Intelligent Trans. System (ITS) Deployment	Strategic Growth Plan	Caltrans	Regions	State ITS; Congestion Management Plan	.007	2.17
Mainstream Energy & GHG into Plans and Projects	Office of Policy Analysis & Research; Division of Environmental Analysis	Interdepartmental effort		Policy establishment, guidelines, technical assistance	Not Estimated	Not Estimated
Educational & Information Program	Office of Policy Analysis & Research	Interdepartmental, CalEPA, CARB, CEC		Analytical report, data collection, publication, workshops, outreach	Not Estimated	Not Estimated
Fleet Greening & Fuel Diversification	Division of Equipment	Department of General Services		Fleet Replacement B20 B100	0.0045	0.0065 0.45 .0225
Non-vehicular Conservation Measures	Energy Conservation Program	Green Action Team		Energy Conservation Opportunities	0.117	.34
Portland Cement	Office of Rigid Pavement	Cement and Construction Industries		2.5 % limestone cement mix 25% fly ash cement mix > 50% fly ash/slag mix	1.2 .36	3.6
Goods Movement	Office of Goods Movement	Cal EPA, CARB, BT&H, MPOs		Goods Movement Action Plan	Not Estimated	Not Estimated
Total					2.72	18.67

Adaptation Strategies

“Adaptation strategies” refer to how Caltrans and others can plan for the effects of climate change on the State’s transportation infrastructure and strengthen or protect the facilities from damage. Climate change is expected to produce increased variability in precipitation, rising temperatures, rising sea levels, storm surges and intensity, and the frequency and intensity of wildfires. These changes may affect the transportation infrastructure in various ways, such as damaging roadbeds by longer periods of intense heat; increasing storm damage from flooding and erosion; and inundation from rising sea levels. These effects will vary by location and may, in the most extreme cases, require that a facility be relocated or redesigned. There may also be economic and strategic ramifications as a result of these types of impacts to the transportation infrastructure.

Climate change adaption must also involve the natural environment. Efforts are underway on a statewide-level to develop strategies to cope with impacts to habitat and biodiversity through planning and conservation. The results of these efforts will help California agencies to plan and implement mitigation strategies for programs and projects.

For additional information regarding the potential impacts of climate change in California, see *Our Changing Climate: Assessing the Risks to California, A Summary Report from the California Climate Change Center* at <http://www.energy.ca.gov/2006publications/CEC-500-2006-077/CEC-500-2006-077.PDF>.

Summary of Avoidance and Minimization Measures

The following measures will be incorporated into the project plans and specifications to avoid and minimize the project's environmental impacts to a less-than-significant level:

Cultural Resources

- The conduit wires that need to be installed on the roof will first be mounted to supports that do not penetrate the roof. The supports with conduit wire will require small holes in the existing structural members just below the roof.

Hazardous Waste

- Inclusion of Non-Standard Specification (NSSP) for lead, which will include a Lead Compliance Plan (LCP) that will address the proper handling, treatment, and disposal of any lead-containing material. This will ensure the health and safety of construction workers and the staff of the 34th Street Maintenance Station.
- Inclusion of an NSSP for asbestos, which will include an Asbestos Compliance Plan (ACP) that will address the proper handling and disposal of any ACMs. Later during the Plans, Specifications, and Estimate (PS&E) phase of the project, the Caltrans Office of Hazardous Waste will submit the appropriate NSSPs for ACM and the Lead Compliance Plan to the Caltrans Office of Engineering Services for approval and inclusion into the Contractor's Specifications and Cost Estimate .

List of Preparers

The following Caltrans North Region staff contributed to the preparation of this Initial Study:

Georgette Neale, Associate Environmental Planner. Contribution: Environmental Studies Coordinator and writer of Draft Initial Study.

Jeremy Ketchum, Senior Environmental Planner. Contribution: Environmental Branch Chief

Clark Peri, Project Manager. Contribution: Project Manager

Alan M. Torres, Project Senior Engineer. Contribution: Project Design

Erick Wulf, Associate Environmental Planner (Archaeology). Contribution: Cultural Resource Report & Finding/Screened Undertaking Assessment

Joan Fine, Associate Environmental Planner (Architectural History). Contribution: Historic Resources Compliance Report (HRCR).

Erik Schwab, Associate Environmental Planner (Natural Science). Contribution: Project Biologist, Natural Environment Study (NES)

Jason Lee, Transportation Engineer. Contribution: Hazardous Waste Initial Site Assessment.

Kathleen Grady, Landscape Architect. Contribution: Visual Impact Report

Sharon Tang, Transportation Engineer. Contribution: Air Quality Assessment

Benjamin Tam, Transportation Engineer. Contribution: Noise Assessment

Kevin Evarts, Transportation Engineer for NPDES. Contribution: Water Quality Assessment.

Douglas Coleman, Senior Transportation Engineer for NPDES. Contribution: Senior duties for NPDES.

Technical Studies

- Air Quality Assessment, July 22, 2009.
- Noise Analysis Report, July 21, 2009.
- Cultural Resource Report and Finding/Screened Undertaking Assessment, April 15, 2010.
- Historic Resources Compliance Report (HRCR), February 28, 2011.
- Natural Environmental Study (NES), October 22, 2009.
- Hazardous Waste Initial Site Assessment, March 3, 2010.
- Visual Impact Report, February 18, 2011.
- Water Quality Assessment, July 15, 2009.

Footnotes and References

¹ Lead-**Containing** Paint Ban

Sep 2, 1977 ... CPSC Announces Final **Ban** On Lead-Containing Paint. WASHINGTON, D.C. (Sept. 2). Website: www.cpsc.gov/cpsc/pub/prerel/prhtml77/77096.html

² Asbestos Ban and Phase Out | Asbestos | US EPA, **Asbestos Ban and Phase Out**. Website: www.epa.gov/asbestos/pubs/ban.

Distribution List

A copy of this Initial Study with Negative Declaration was sent to the following agencies, organizations, and individuals:

Local and Regional Agencies

City of Sacramento
Community Development - Planning Division
300 Richards Boulevard
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State Agencies

The Governor's Office of Planning and Research
State Clearinghouse
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Appendix A: Title VI Policy Statement

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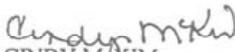
July 20, 2010

TITLE VI POLICY STATEMENT

The California Department of Transportation, under Title VI of the Civil Rights Act of 1964 and related statutes, ensures that no person in the State of California shall, on the grounds of race, color, national origin, sex, disability, or age, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity it administers.

For information or guidance on how to file a complaint based on the grounds of race, color, national origin, sex, disability, or age, please visit the following web page:
http://www.dot.ca.gov/hq/bep/title_vi/t6_violated.htm.

Additionally, if you need this information in an alternate format, such as in Braille or in a language other than English, please contact Charles Wahnon, Manager, Title VI and Americans with Disabilities Act Program, California Department of Transportation, 1823 14th Street, MS-79, Sacramento, CA 95811. Phone: (916) 324-1353 or toll free 1-866-810-6346 (voice), TTY 711, fax (916) 324-1869, or via email: charles_wahnon@dot.ca.gov.


CINDY MCKIM
Director

"Caltrans improves mobility across California"

