

CALIFORNIA ENVIRONMENTAL QUALITY ACT INITIAL STUDY

The Department of Toxic Substances Control (DTSC) has completed the following document for this project in accordance with the California Environmental Quality Act (CEQA) [Pub. Resources Code, div. 13, § 21000 et seq] and accompanying Guidelines [Cal. Code Regs., tit. 14, § 15000 et seq].

PROJECT TITLE: California Department of Transportation (Caltrans) Variance for Reuse of Lead-Contaminated Soils.		CALSTARS CODING: 24067-900191-50
PROJECT ADDRESS: Existing state owned highway right of ways within all Caltrans Districts.	CITY:	COUNTY:
PROJECT SPONSOR: Richard Bailey	CONTACT: rich_bailey@dot.ca.gov	PHONE: 916-653-3421

APPROVAL ACTION UNDER CONSIDERATION BY DTSC:			
<input type="checkbox"/> Initial Permit Issuance	<input type="checkbox"/> Permit Renewal	<input type="checkbox"/> Permit Modification	<input type="checkbox"/> Closure Plan
<input type="checkbox"/> Removal Action Workplan	<input type="checkbox"/> Remedial Action Plan	<input type="checkbox"/> Interim Removal	<input type="checkbox"/> Regulations
<input checked="" type="checkbox"/> Other (specify): Variance			

STATUTORY AUTHORITY:
<input checked="" type="checkbox"/> California H&SC, Chap. 6.5 <input type="checkbox"/> California H&SC, Chap. 6.8 <input type="checkbox"/> Other (specify):

DTSC PROGRAM/ ADDRESS: Hazardous Waste Management Permitting Team 8800 Cal Center Drive Sacramento, California 95826	CONTACT: Wayne Lorentzen	PHONE: (916) 255-3883
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PROJECT DESCRIPTION:

The California Department of Toxic Substances Control (DTSC) is proposing to issue a variance that would allow the California Department of Transportation (Caltrans), under specified terms and conditions, to excavate, stockpile, transport, and reuse soil contaminated with low levels of lead that may be encountered during highway improvement projects conducted within existing state-owned highway right of ways. These projects are individually subject to additional environmental impact assessments as required by the California Environmental Quality Act (CEQA) when Caltrans proposes and approves projects for detailed design and construction.

The variance would waive the provisions of Chapter 6.5, Health and Safety Code (H&SC), and Title 22, California Code of Regulations (22 CCR), that would otherwise require Caltrans to obtain a hazardous waste disposal facility permit and to comply with various generator requirements that concern transportation, manifesting, storage and disposal of hazardous waste. The variance would be issued in accordance with H&SC section 25143 and 22 CCR section 66260.210.

Background

In response to heavy travel loads, many highways and freeways are being improved by Caltrans to increase vehicle capacity and travel safety. The improvement of existing roads allows increased vehicle use without the significant additional cost of purchasing additional rights-of-way that would be needed for a new freeway or roadway alignment. Roadway improvement projects may include filling in existing median areas, widening out over the existing highway shoulders or a combination of widening in these areas. Often, the widening of the driving surface of freeways is

associated with the reconstruction and upgrading of bridges and interchanges. Construction of the widening normally requires development of a two to three-foot thick sub base to carry the new widened lanes and their associated traffic. To allow development of the sub base, existing soils are normally excavated and removed as part of the project construction.

Caltrans has discovered low levels of aerially-deposited lead existing on unpaved median and shoulder areas of some of its roadways. The lead contamination is believed to come from the use of leaded gasoline and fuels that were used for many years by the state's driving population. Testing indicates the soil shows elevated lead levels compared to ambient non-highway environments, but normally not above the 1000 mg/kg TTLC hazardous waste criteria as defined in 22 CCR section 66261.24. While the total lead levels are normally not a concern, a significant number of samples, particularly in the top 6 inches of soil, have shown soluble lead levels in excess of 22 CCR criteria of 5.0 mg/l STLC. The low levels of aerially-deposited lead are normally found within 30 feet of the edge of pavement and are concentrated in the top 6 inches (if present) with lesser amounts down to a depth of two to three feet.

Traditionally, Caltrans has relinquished most excess project soils to the contractor for disposal. However, Caltrans cannot relinquish soils that are considered hazardous waste, such as soils with hazardous levels of lead, even if the levels are barely above the criteria defining the waste as hazardous. Normally, wastes that meet California criteria for hazardous wastes are hauled to permitted disposal facilities. However, hauling of these low levels of lead-contaminated soils to a Class I hazardous waste disposal facility has become very costly. As an alternative, DTSC's Human and Ecological Risk Division (HERD) and Geological Services Unit (GSU) has determined that certain lead contaminated wastes can, under certain conditions, be managed on-site (i.e. not sent to a permitted disposal facility) so that there is not a threat to human health. The capability to manage such soils on-site can result in considerable cost-savings to the State of California. The HERD and GSU recommended conditions would be incorporated into the proposed variance. The memorandum from HERD is attached as Exhibit 2, and the memorandum from GSU is attached as Exhibit 3.

Project Activities:

With DTSC variance approval, soils identified as containing low levels of lead (total or soluble) that are excavated for the improvement of transportation corridors would be reused within the transportation corridor in accordance with variance conditions. It is anticipated that a variety of methods will be identified for the reuse of these soils. Currently, Caltrans has envisioned its use in embankments, and widening and flattening thereof; use as backfill for structures, retaining walls, trenches and depressions resulting from the removal of obstructions; as road base fill; contouring of fill areas; raising grades e.g., Park & Ride lots; and the placement of soils under the traveled way. Additional uses of these soils may be identified as Caltrans designs more projects with reuse of these soils in mind. Attached are two examples of proposed methods for the placement of lead-containing soils within the project as sub-base and fill area behind a retaining wall (See Exhibit 4). These plans are conceptual examples, and do not necessarily apply directly to specific Caltrans projects. A sample list of project locations is included in Exhibit 5. As previously stated above, these projects are individually subject to additional environmental impact assessments as required by CEQA when Caltrans proposes and approves projects for detailed design and construction.

B. Proposed Storage Lifetime

The placement of low-level lead-contaminated soils within the embankments, fills, and subsurface structures of the freeway facilities is envisioned to be long-term storage of these soils. Normally a highway has a design life of 30 years; however, many roadways now have life spans in excess of 30 years, with some newer freeways being designed for 50 year life spans. At the end of the facility design life span the facility will normally be upgraded (widened and resurfaced) or maintained as is for the foreseeable future. Caltrans very rarely abandons high -occupancy alignments. The variance will require Caltrans to conduct long-term maintenance of lead contaminated soil that is managed pursuant to the variance. The variance will also require any new owner of areas that contain reused lead contaminated soil to comply with the same obligations that are imposed on Caltrans. Examples of the obligations are that Caltrans will be required to inspect and maintain the covers in perpetuity at all locations where the lead contaminated soil has been buried and keep records of the locations of reused lead contaminated soil.

C. Management Practices

The following describes handling methods used from the point of generation to placement or storage of the soils:

1. Clearing and Grubbing:

Clearing and grubbing of the construction area is generally performed in advance of excavation and grading operations. This work consists of clearing all vegetable growth, such as trees, logs, upturned stumps, roots of downed trees, brush, grass, weeds, and all other objectionable material, including concrete or masonry, within the highway construction areas. Unless otherwise specified, the entire length of the project is cleared. Dirt, sediment, or soil clinging to this material is

separated at the location of removal.

2. Excavation:

Selected soil excavation consists of excavation involved in the grading and construction of the roadway. Soils with lead contamination will be defined in the plans as material that is excavated from an identified location within the right-of-way, as shown on the plans or specified in the special provisions of each contract.

Excavation is done to grade tolerance and can vary no more than .05 foot to .1 foot above or below the grade established by the Engineer and/or plans. With contaminated soils, excavation operations will be conducted in such a manner that haul vehicles will not travel over the contaminated soils. During excavation the contractor must comply with all the requirements set forth in Divisions 11,12,13,14, and 15 of the Vehicle Code. Equipment will normally include graders, scrapers, front end loaders, dump trucks, and tractor/trailer trucks.

3. Hauling:

When practicable, the contaminated soil will be hauled directly from excavation point to its final position where it will be placed and compacted to meet roadway compaction specifications. Any spillage resulting from hauling operations along or across the traveled way will be removed immediately by the contractor. As shown on the plans, vehicles will be loaded within the limits of excavation. When loaded, no soil will extend above the sides or rear of the vehicle. Vehicles will be covered during the haul.

In some instances, primarily due to construction restrictions, it may not be practical to place contaminated soil directly into its final placement point. In these cases, the soil will be stockpiled in a designated area while waiting for placement on the project.

4. Dust Control:

This work consists of applying either water or dust palliative, or both, for the alleviation or prevention of dust. Dust resulting from the performance of the work, either inside or outside the right-of-way, shall be controlled by the contractor. Water for use in the work may be potable or non-potable. If the contractor uses reclaimed waste water in the work, the sources and discharge of reclaimed waste must meet the California Department of Health Services water reclamation criteria and the Regional Water Quality Control Board requirements. The standard and special provisions of each contract specifically address and inform the contractor of the need for stringent dust control measures. In addition, Caltrans must comply with any local air district's fugitive dust control rules for construction activities.

5. Erosion Control:

Where erosion of soil may cause water pollution due to the nature of the soil or the season of the year, the contractor shall install permanent erosion control features concurrently with or immediately following grading and or placement operations. Soil derived from roadway work will not be deposited in stream channels or where it would be washed away by stream flows. Soil will not be allowed to drift onto pavement. Erosion control plans from the contractor are mandated by the standard specifications. Special provisions of each contract for covering or protecting stockpiles of these soils will be included in contracts where immediate placement of these soils is not possible.

6. Ultimate Disposition of Waste:

Contaminated soil will be placed in embankments, placed in general fill areas, behind retaining walls, and below pavement or shoulder sections. Compaction, lifts, and moisture will depend on final placement location. Placement and compaction will conform to standard provisions "Earthwork" and "Aggregate Sub-base". Contaminated soil will be used as shown on the construction plans or specified in the special provisions of each contract. Contaminated soil not used as a specific layer will be placed in the roadway prism in accordance with standard contract provisions for placing embankment soil or structure backfill.

When contaminated soils are shown on the plans or designated in the special provisions of each contract as a specified layer, spreading and compacting the soil shall conform to standard aggregate sub-base provisions.

D. Operational Procedures

Under the heading of public safety, the contractor is required to provide site security in all contracts. These provisions include conforming to all OSHA requirements, lighting for night work, signs, traffic control, flagging, maintaining and/or providing fencing, temporary railing, and barricades.

1. Site security:

Fencing on each freeway project will change depending on the site conditions and the presence or absence of sound walls. Caltrans uses barbed wire fence, wire mesh fence and chain link fence. Barbed wire and wire mesh fences consist of five lines of barbed wire or wire mesh and three lines of barbed wire. Both types are fastened to metal posts or wood posts. The required fencing is specified in each contract. The contractor is required to maintain fencing and site security during the course of the contract and is responsible for preventing damage and repairing damaged features.

When the following conditions exist, the general contractor is required to install a temporary railing between any lane carrying public traffic and any excavation, obstacle or storage area:

- a. Excavations. Any excavation near the edge that is 12 feet or less from the edge of the lane, except:
 - i. Excavations covered with sheet steel or concrete covers of adequate thickness to prevent accidental entry by traffic or the public.
 - ii. Excavations less than one foot deep.
 - iii. Trenches less than one foot wide for irrigation pipe or electrical conduit or excavations less than one foot in diameter.
 - iv. Excavations parallel to the lane for the purpose of pavement widening or reconstruction.
 - v. Excavations in side slopes, where the slope is steeper than 4:1.
- b. Storage Areas. Whenever material or equipment is stored within 12 feet of the lane and such storage is not otherwise prohibited.

Except for installing, maintaining and removing traffic control devices, whenever work is performed or equipment is operated in the work areas, the contractor must close the adjacent traffic lane unless otherwise provided in the specifications. These closures are based on traffic speed. When traffic speeds are over 45 miles per hour, as would be expected on a freeway, and work is within 6 feet of a traffic lane, the adjacent lane must be closed.

2. Inspection Schedule:

The Resident Engineer (RE) and her/his designated inspectors provide constant overview and authority on the following: all questions relating to the work performed, all questions that may arise as to the interpretation of the plans and specifications, and, all questions as to the acceptable fulfillment of the contract on the part of the contractor. Her/his decisions are final and she/he has the authority to enforce and make effective such decisions and orders that the contractor fails to carry out promptly. A project log is maintained by the RE detailing any decisions and/or variations from the contract requirements. Estimated quantities and location of contaminated soils will be recorded by the RE as part of the project documentation.

Before the start of work, the contractor designates in writing, an authorized representative who has the authority to act for the contractor. The representative must be present at the site of work at all times while work is actually in progress on the contract. When work is not in progress, or during periods when work is suspended, arrangements are made for any emergency work that may be required.

The Caltrans RE has, at all times, safe access to the work during its construction. All work done and all materials used are subject to her/his inspection. Projects financed in whole or part by Federal funds are subject to inspection at all times by the Federal agency involved.

Preparedness and Prevention Requirements:

a. Equipment:

For each contract, the contractor identifies each piece of equipment, other than hand tools, by means of an identifying number plainly stenciled or stamped on the equipment at a conspicuous location, and furnishes to the RE a list giving the description of each piece of equipment and its identifying number. The make, model number, and empty gross weight of each unit of compacting equipment are stamped or stenciled on the unit. The gross weight is either the manufacturer's rated weight or the scale weight. All meters and scales are identified, rated, and marked.

Certain specifications may provide that equipment of a particular size and type is to be used to perform portions of the work. The contractor may request in writing, permission to use equipment of a different size or type in place of the equipment specified. The contractor may be required to furnish evidence the equipment proposed is capable of producing work equal to, or better than, that which can be produced by the equipment specified.

b. Communications:

Caltrans' vehicles are equipped with two-way radios with the radio base being the construction office. The radio is monitored by office personnel while vehicles are in the field.

c. Backup Contract:

Caltrans has a Construction Emergency Contract with 12 (this number will vary by year) contractors who are able to mobilize within 24 hours. This contract is available to perform right-of-way clearance of hazardous materials found during construction.

d. Prevention of Reaction of Ignitable, Reactive and Incompatible Wastes:

The contaminant of concern is lead in soil. The lead appears to be present due predominately to vehicle emissions. Lead is non-reactive in this form. The presence of lead is determined prior to construction using a site investigation contract. If other elements or chemicals are suspected during this investigation, additional testing is done to identify and quantify these materials. Any soils identified as hazardous waste due to other elements or chemicals outside of those identified in the variance, will be managed and disposed of at a waste facility authorized to accept such waste.

If the contractor encounters unexpected materials that she/he suspects to be hazardous, the construction emergency contract can be used to investigate and identify constituents and concentrations. Removal and disposal of hazardous waste can be done by the construction emergency contractor.

e. Contingency Plan:

Contingencies to handle truck spills of soil with lead, dust control, erosion control, and unidentified waste have been discussed in previous sections.

f. Personnel Training and Safety:

Personnel training and safety are part of Caltrans' program and are required of the contractor in the special provisions of each contract. Caltrans has developed and provided training on the presence of lead in soil along the right-of-way to construction personnel. This class addressed the health risks associated with lead, the levels of lead present in soil next to the right-of-way, the personnel air monitoring conducted on contractor and Caltrans personnel and the monitoring results. Regulatory requirements and waste management issues unique to lead-contaminated soil were also addressed.

The Caltrans safety office develops policy and guidance for construction. The office has a Certified Industrial Hygienist on contract to provide air monitoring and assistance to the Districts in dealing with exposure to lead.

E. Contractors:

The Standard Specifications require that the contractor conform to all applicable occupational safety and health standards, rules, regulations, and orders established by the State of California. The special provisions of each contract provide a material handout to the contractor that gives the testing results for the contract area. The special provisions of each contract then list the Title 8, section 1532.1 requirements for health and safety related to construction projects with lead. The contractor is required to inform and train her/his personnel as required by this section. The contractor is required to develop a compliance plan, approved by a certified industrial hygienist, before beginning field work in areas with lead and submit this plan to the RE.

It is the contractor's responsibility to provide for the safety of traffic and the public during construction. In the standard provisions, this requirement is traffic related. The special provisions of each contract require dust control and air monitoring to ensure that dust control measures are effective. Air monitoring is also conducted to meet project specific Air Quality Management District permit requirements.

ENVIRONMENTAL IMPACT ANALYSIS:

1. Aesthetics

Project Activities Likely to Create an Impact: None

Description of Baseline Environmental Conditions: The variance would be implemented within the right-of-way of State highways in urbanized and some rural areas where construction projects are planned to widen roads, add high occupancy vehicle lanes, change interchange configurations, construct sound walls, add Park & Ride facilities and install pumping plant facilities to control surface drainage. These are planned projects funded through local, state, and federal transportation improvement programs and are being constructed for traffic improvement and safety reasons.

The highway corridors are state-owned properties that are generally two to eight-lane concrete or asphalt paved corridors and are fenced for access control. Shoulders and median areas may be paved or composed of graded fill or native sedimentary materials. Materials underlying traveled lanes are generally composed of graded fill and base material aggregate for structural support.

Surface drainage is controlled by sloping of lanes to direct rain runoff to medians, shoulders, and then drain inlets or side ditches. Drainage control is necessary to prevent damage to the pavement structure and for safety purposes. Drainage inlets may lead to pumping plants that lift water to storm drains or directly into storm drains. For parking lots, drainage is directed to drainage inlets. Drainage inlets are grated to prevent entry and keep trash and debris out as much as possible.

The implementation of the allowed variance activities (reuse of lead-contaminated soil) will not obstruct any scenic vistas or create offensive sites. The activities allowed by the variance will be implemented on existing freeway corridors where construction projects will be completed to widen roads, add lanes, change interchange configurations, add Park & Ride facilities and install pumping plant facilities to control surface drainage.

Analysis as to whether or not project activities would:

- a. Have a substantial adverse effect on a scenic vista.

Impact Analysis: The variance to allow reuse of lead-contaminated soil is not anticipated to have significant impacts to scenic vistas different from normal Caltrans projects. Each individual reuse project will undergo a specific environmental review during that project's approval phase. There are no anticipated significant impacts other than those mentioned above and these impacts will be evaluated during the project-specific environmental review.

Conclusion:

- Potentially Significant Impact
- Potentially Significant Unless Mitigated
- Less Than Significant Impact
- No Impact

- b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings and historic buildings within a state scenic highway.

Impact Analysis: The variance to allow reuse of lead-contaminated soil is not anticipated to have significant impacts to scenic resources different from normal Caltrans projects. Each individual reuse project will undergo a specific environmental review during that project's approval phase. There are no anticipated significant impacts other than those mentioned above and these impacts will be evaluated during the project-specific environmental review.

Conclusion:

- Potentially Significant Impact
- Potentially Significant Unless Mitigated
- Less Than Significant Impact
- No Impact

- c. Substantially degrade the existing visual character or quality of the site and its surroundings.

Impact Analysis: The variance to allow reuse of lead-contaminated soil is not anticipated to have significant impacts to existing visual character of the site and surroundings different from normal Caltrans projects. Each individual reuse project will undergo a specific environmental review during that project's approval phase. There are no anticipated significant impacts other than those mentioned above and these impacts will be evaluated during the project-specific environmental review.

Conclusion:

- Potentially Significant Impact
 Potentially Significant Unless Mitigated
 Less Than Significant Impact
 No Impact

- d. Create a new source of substantial light of glare that would adversely affect day or nighttime views in the area.

Impact Analysis: The variance to allow reuse of lead-contaminated soil is not anticipated to create new sources of substantial light glare different from normal Caltrans projects. Each individual reuse project will undergo a specific environmental review during that project's approval phase. There are no anticipated significant impacts other than those mentioned above and these impacts will be evaluated during the project-specific environmental review.

Conclusion:

- Potentially Significant Impact
 Potentially Significant Unless Mitigated
 Less Than Significant Impact
 No Impact

2. Agricultural Resources

Project Activities Likely to Create an Impact: None

Description of Baseline Environmental Conditions: Since most of the individual projects are either lane widening, additions of lanes in freeway medians, or interchange and intersection modifications, the construction projects will be almost entirely within the existing Caltrans right-of-way. Accordingly, critical or sensitive habitats or agricultural areas will not be affected by any activities allowed under this variance. Agricultural resources such as farmland or land zoned for agricultural use will not be impacted by this variance.

Analysis as to whether or not project activities would:

- 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.

Impact Analysis: There are no anticipated significant impacts to agricultural resources for these projects. Any possible impacts to the agricultural resources will be addressed separately in detail when each individual reuse project is being developed by the Caltrans district project manager.

Conclusion:

- Potentially Significant Impact
 Potentially Significant Unless Mitigated
 Less Than Significant Impact
 No Impact

- b. Conflict with existing zoning or agriculture use, or Williamson Act contract.

Impact Analysis: There are no anticipated significant impacts to agricultural resources for these projects. Any possible impacts to the agricultural resources will be addressed separately in detail when each individual reuse project is being developed by the Caltrans district project manager.

Conclusion:

- Potentially Significant Impact
 Potentially Significant Unless Mitigated
 Less Than Significant Impact

No Impact

- c. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural uses.

Impact Analysis: There are no anticipated significant impacts to agricultural resources for these projects. Any possible impacts to the agricultural resources will be addressed separately in detail when each individual reuse project is being developed by the Caltrans district project manager.

Conclusion:

- Potentially Significant Impact
- Potentially Significant Unless Mitigated
- Less Than Significant Impact
- No Impact

3. Air Quality

Project Activities Likely to Create an Impact: None

Description of Baseline Environmental Conditions: Dust control measures will be implemented during earthwork activities. Dust will be controlled by water or dust palliative or both. When vehicles are loaded, no soil will extend above the sides or rear of the vehicle and will be covered during the haul to the placement site. Refer also to environmental impact item Hazards and Hazardous Materials.

Standard construction contract provisions direct the contractor to meet dust control requirements. Caltrans projects will also be subject to local Air Quality Management Districts' regulations to control dust emissions.

Analysis as to whether or not project activities would:

- a. Conflict with or obstruct implementation of the applicable air quality plan.

Impact Analysis: The issuance of the variance will allow reuse of lead-contaminated soil within existing State-owned highway right-of-way for various projects undertaken by Caltrans. As explained in the Project Description, each individual reuse project will undergo a specific environmental review during that project's approval phase. There are no anticipated significant impacts to air because the dust control measures outlined above and in the Project Description ensure there are no substantive changes to air quality.

Conclusion:

- Potentially Significant Impact
- Potentially Significant Unless Mitigated
- Less Than Significant Impact
- No Impact

- b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation.

Impact Analysis: The issuance of the variance will allow reuse of lead-contaminated soil within existing State-owned highway right-of-way for various projects undertaken by Caltrans. As explained in the Project Description, each individual reuse project will undergo a specific environmental review during that project's approval phase. There are no anticipated significant impacts to air because the dust control measures outlined above and in the Project Description ensure there are no substantive changes to air quality.

Conclusion:

- Potentially Significant Impact
- Potentially Significant Unless Mitigated
- Less Than Significant Impact
- No Impact

- c. Result in 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).

Impact Analysis: The issuance of the variance will allow reuse of lead-contaminated soil within existing State-owned highway right-of-way for various projects undertaken by Caltrans. As explained in the Project Description, each individual reuse project will undergo a specific environmental review during that project's approval phase. There are no anticipated significant impacts to air because the dust control measures outlined above and in the Project Description ensure there are no substantive changes to air quality.

Conclusion:

- Potentially Significant Impact
- Potentially Significant Unless Mitigated
- Less Than Significant Impact
- No Impact

- d. Expose sensitive receptors to substantial pollutant concentrations.

Impact Analysis: The issuance of the variance will allow reuse of lead-contaminated soil within existing State-owned highway right-of-way for various projects undertaken by Caltrans. As explained in the Project Description, each individual reuse project will undergo a specific environmental review during that project's approval phase. There are no anticipated significant impacts to air because the dust control measures outlined above and in the Project Description ensure there are no substantive changes to air quality.

Conclusion:

- Potentially Significant Impact
- Potentially Significant Unless Mitigated
- Less Than Significant Impact
- No Impact

- e. Create objectionable odors affecting a substantial number of people.

Impact Analysis: The issuance of the variance will allow reuse of lead-contaminated soil within existing State-owned highway right-of-way for various projects undertaken by Caltrans. As explained in the Project Description, each individual reuse project will undergo a specific environmental review during that project's approval phase. There are no anticipated significant impacts to air because the dust control measures outlined above and in the Project Description ensure there are no substantive changes to air quality.

Conclusion:

- Potentially Significant Impact
- Potentially Significant Unless Mitigated
- Less Than Significant Impact
- No Impact

- f. Result in human exposure to Naturally Occurring Asbestos (see also Geology and Soils, f.).

Impact Analysis: The issuance of the variance will allow reuse of lead-contaminated soil within existing State-owned highway right-of-way for various projects undertaken by Caltrans. As explained in the Project Description, each individual reuse project will undergo a specific environmental review during that project's approval phase. There are no anticipated significant impacts to air because the dust control measures outlined above and in the Project Description ensure there are no substantive changes to air quality.

Conclusion:

- Potentially Significant Impact
- Potentially Significant Unless Mitigated
- Less Than Significant Impact
- No Impact

4. Biological Resources

Project Activities Likely to Create an Impact: None

Description of Baseline Environmental Conditions: Since most of the individual projects are either lane widening, additions of lanes in freeway medians, or interchange and intersection modifications, the construction projects will be almost entirely within the existing Caltrans right-of-way. Accordingly, critical or sensitive habitats and biological resources

will not be affected by any activities allowed under this variance. In addition, any possible impacts to these resources will be addressed separately, in detail, as each individual reuse project is developed by the Caltrans district project manager.

Analysis as to whether or not project activities would:

- 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.

Impact Analysis: There are no anticipated significant impacts to biological resources for these projects. Any possible impacts to these resources will be addressed separately in detail when each individual reuse project is being developed by the Caltrans district project manager.

Conclusion:

- Potentially Significant Impact
- Potentially Significant Unless Mitigated
- Less Than Significant Impact
- No Impact

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

Impact Analysis: There are no anticipated significant impacts to biological resources for these projects. Any possible impacts to these resources will be addressed separately in detail when each individual reuse project is being developed by the Caltrans district project manager.

Conclusion:

- Potentially Significant Impact
- Potentially Significant Unless Mitigated
- Less Than Significant Impact
- No Impact

- 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.

Impact Analysis: There are no anticipated significant impacts to biological resources for these projects. Any possible impacts to these resources will be addressed separately in detail when each individual reuse project is being developed by the Caltrans district project manager.

Conclusion:

- Potentially Significant Impact
- Potentially Significant Unless Mitigated
- Less Than Significant Impact
- No Impact

- d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

Impact Analysis: There are no anticipated significant impacts to biological resources for these projects. Any possible impacts to these resources will be addressed separately in detail when each individual reuse project is being developed by the Caltrans district project manager.

Conclusion:

- Potentially Significant Impact
- Potentially Significant Unless Mitigated
- Less Than Significant Impact
- No Impact

- e. Conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

Impact Analysis: There are no anticipated significant impacts to biological resources for these projects. Any possible impacts to these resources will be addressed separately in detail when each individual reuse project is being developed by the Caltrans district project manager.

Conclusion:

- Potentially Significant Impact
 Potentially Significant Unless Mitigated
 Less Than Significant Impact
 No Impact

- 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.

Impact Analysis: There are no anticipated significant impacts to biological resources for these projects. Any possible impacts to these resources will be addressed separately in detail when each individual reuse project is being developed by the Caltrans district project manager.

Conclusion:

- Potentially Significant Impact
 Potentially Significant Unless Mitigated
 Less Than Significant Impact
 No Impact

5. Cultural Resources

Project Activities Likely to Create an Impact: None

Description of Baseline Environmental Conditions: Since the variance activities will be conducted in concert with projects that are either lane widening, additions of lanes in freeway medians, or interchange modifications that will be located in existing developed right-of-way, it is unlikely that there will be any impacts to archaeological sites, paleontological sites, or historical resources.

Analysis as to whether or not project activities would:

- a. Cause a substantial adverse change in the significance of a historical resource as defined in 15064.5.

Impact Analysis: No significant impacts to archaeological sites, paleontological sites, or historical resources on these existing developed right-of ways are anticipated. Any effects to these resources will be addressed specifically when the project description and CEQA analysis for each individual reuse project is being developed by Caltrans.

Conclusion:

- Potentially Significant Impact
 Potentially Significant Unless Mitigated
 Less Than Significant Impact
 No Impact

- b. Cause a substantial adverse change in the significance of an archeological resource pursuant to 15064.5.

Impact Analysis: No significant impacts to archaeological sites, paleontological sites, or historical resources on these existing developed right-of ways are anticipated. Any effects to these resources will be addressed specifically when the project description and CEQA analysis for each individual reuse project is being developed by Caltrans.

Conclusion:

- Potentially Significant Impact
 Potentially Significant Unless Mitigated
 Less Than Significant Impact
 No Impact

- c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

Impact Analysis: No significant impacts to archaeological sites, paleontological sites, or historical resources on these existing developed right-of ways are anticipated. Any effects to these resources will be addressed specifically when the project description and CEQA analysis for each individual reuse project is being developed by Caltrans.

Conclusion:

- Potentially Significant Impact
 Potentially Significant Unless Mitigated
 Less Than Significant Impact
 No Impact

- d. Disturb any human remains, including those interred outside of formal cemeteries.

Impact Analysis: No significant impacts to archaeological sites, paleontological sites, or historical resources on these existing developed right-of ways are anticipated. Any effects to these resources will be addressed specifically when the project description and CEQA analysis for each individual reuse project is being developed by Caltrans.

Conclusion:

- Potentially Significant Impact
 Potentially Significant Unless Mitigated
 Less Than Significant Impact
 No Impact

6. Geology and Soils

Project Activities Likely to Create an Impact: None

Description of Baseline Environmental Conditions: The variance would be implemented within the right-of-way of State highways in urbanized and some rural areas where construction projects are planned to widen roads, add high occupancy vehicle lanes, change interchange configurations, construct sound walls, add Park & Ride facilities and install pumping plant facilities to control surface drainage. These are planned projects funded through local, State, and federal transportation improvement programs and are being constructed for traffic improvement and safety reasons.

The highway corridors are state-owned properties that are generally two to eight-lane concrete or asphalt paved corridors and are fenced for access control. Shoulders and median areas may be paved or composed of graded fill or native sedimentary materials. Materials underlying traveled lanes are generally composed of graded fill and base material aggregate for structural support.

Surface drainage is controlled by sloping of lanes to direct rain runoff to medians, shoulders, and then drain inlets or side ditches. Drainage control is necessary to prevent damage to the pavement structure and for safety purposes. Drainage inlets may lead to pumping plants that lift water to storm drains or directly into storm drains. For parking lots, drainage is directed to drainage inlets. Drainage inlets are grated to prevent entry and keep trash and debris out as much as possible.

Analysis as to whether or not project activities would:

- a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
- ❖ 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).
 - ❖ Strong seismic ground shaking.
 - ❖ Seismic-related ground failure, including liquefaction.
 - ❖ Landslides.

Impact Analysis: All activities allowed by this variance will be conducted within existing highway right-of-way in which substantial earthwork activity has already occurred. In concert with the road projects that are subject to individual environmental review, the lead-contaminated soil will be used in accordance with the variance conditions for

embankments, widening and flattening, backfill for structures, retaining walls, trenches and depression, road base fill, placement under new roads, and raising grades. Dirt and erosion control measures will be implemented during earthwork activities. Dust will be controlled by water or dust palliative or both. Any spillage resulting from hauling operations along or across the traveled way will be immediately removed by the contractor. When vehicles are loaded, no lead-contaminated soil will extend above the sides or rear of the vehicle and will be covered during the haul. Caltrans will require the contractor to install permanent erosion control features concurrently with or immediately following grading and or placement operations. The excavation or placement of lead-contaminated soil will not be within or adjacent to stream channels or 100-year flood plains except to the extent that road construction activities in those areas have been separately evaluated and approved under CEQA, and necessary mitigation or preventative measures applied. In addition, the activities will not occur on or adjacent to any riparian areas or wetlands, again with the exception of cases where, after separate project level evaluation under CEQA and other applicable law, it is determined that necessary mitigation or preventative measures will be applied.

As explained in the Project Description, each individual reuse project will undergo a specific environmental review during that project's approval phase. There are no anticipated significant impacts to earth other than those mentioned above and these impacts will be evaluated during the project-specific environmental review.

Conclusion:

- Potentially Significant Impact
 Potentially Significant Unless Mitigated
 Less Than Significant Impact
 No Impact

- b. Result in substantial soil erosion or the loss of topsoil.

Impact Analysis: All activities allowed by this variance will be conducted within existing highway right-of-way in which substantial earthwork activity has already occurred. In concert with the road projects that are subject to individual environmental review, the lead-contaminated soil will be used in accordance with the variance conditions for embankments, widening and flattening, backfill for structures, retaining walls, trenches and depression, road base fill, placement under new roads, and raising grades. Dirt and erosion control measures will be implemented during earthwork activities. Caltrans will require the contractor to install permanent erosion control features concurrently with or immediately following grading and or placement operations.

Conclusion:

- Potentially Significant Impact
 Potentially Significant Unless Mitigated
 Less Than Significant Impact
 No Impact

- 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.

Impact Analysis: All activities allowed by this variance will be conducted within existing highway right-of-way in which substantial earthwork activity has already occurred. In concert with the road projects that are subject to individual environmental review, the lead-contaminated soil will be used in accordance with the variance conditions for embankments, widening and flattening, backfill for structures, retaining walls, trenches and depression, road base fill, placement under new roads, and raising grades. Caltrans will require the contractor to install permanent erosion control features concurrently with or immediately following grading and or placement operations. The excavation or placement of lead-contaminated soil will not be within or adjacent to stream channels or 100-year flood plains except to the extent that road construction activities in those areas have been separately evaluated and approved under CEQA, and necessary mitigation or preventative measures applied.

Conclusion:

- Potentially Significant Impact
 Potentially Significant Unless Mitigated
 Less Than Significant Impact
 No Impact

- d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.

Impact Analysis: All activities allowed by this variance will be conducted within existing highway right-of-way in which substantial earthwork activity has already occurred. In concert with the road projects that are subject to individual environmental review, the lead-contaminated soil will be used in accordance with the variance conditions for embankments, widening and flattening, backfill for structures, retaining walls, trenches and depression, road base fill, placement under new roads, and raising grades.

Conclusion:

- Potentially Significant Impact
 Potentially Significant Unless Mitigated
 Less Than Significant Impact
 No Impact

- 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 water.

Impact Analysis: All activities allowed by this variance will be conducted within existing highway right-of-way in which substantial earthwork activity has already occurred. In concert with the road projects that are subject to individual environmental review, the lead-contaminated soil will be used in accordance with the variance conditions for embankments, widening and flattening, backfill for structures, retaining walls, trenches and depression, road base fill, placement under new roads, and raising grades.

Conclusion:

- Potentially Significant Impact
 Potentially Significant Unless Mitigated
 Less Than Significant Impact
 No Impact

- f. Be located in an area containing naturally occurring asbestos (see also Air Quality, f.).

Impact Analysis: All activities allowed by this variance will be conducted within existing highway right-of-way in which substantial earthwork activity has already occurred. In concert with the road projects that are subject to individual environmental review, the lead-contaminated soil will be used in accordance with the variance conditions for embankments, widening and flattening, backfill for structures, retaining walls, trenches and depression, road base fill, placement under new roads, and raising grades.

Conclusion:

- Potentially Significant Impact
 Potentially Significant Unless Mitigated
 Less Than Significant Impact
 No Impact

7. Hazards and Hazardous Materials

Project Activities Likely to Create an Impact: None

Description of Baseline Environmental Conditions: The variance will allow Caltrans to excavate, stockpile, transport, and reuse soil contaminated with low concentrations of aerially-deposited lead on transportation projects within State-owned existing highway right-of-way.

The presence of lead will be determined prior to construction using a site investigation contract. If other elements or chemicals are suspected during this investigation, additional testing is done to identify and quantify these materials. Any soils identified as hazardous waste due to elements or compounds other than lead will be managed and disposed of at a waste facility authorized to accept such waste.

If the contractor encounters unexpected materials that she/he suspects are hazardous, the construction emergency contract can be used to investigate and identify constituents and concentrations. Removal and disposal of hazardous waste must be done by the construction emergency contractor.

Contingencies plans are required to handle truck spills of lead-contaminated soil, control dust and erosion, and properly deal with unidentified waste as discussed in above paragraph and also under environmental impact items Air Quality and Geology/Soil.

Analysis as to whether or not project activities would:

- a. Create a significant hazard to the public or the environment throughout the routine transport, use or disposal of hazardous materials.

Impact Analysis: The activities posed under the variance are not expected to have any significant effects on the environment. Management activities, operation plans, an inspection program, emergency plans, and employee training requirements help ensure safe conditions during operations.

Conclusion:

- Potentially Significant Impact
 Potentially Significant Unless Mitigated
 Less Than Significant Impact
 No Impact

- 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.

Impact Analysis: The activities posed under the variance are not expected to have any significant effects on the environment. Management activities, operation plans, an inspection program, emergency plans, and employee training requirements help ensure safe conditions during operations.

Conclusion:

- Potentially Significant Impact
 Potentially Significant Unless Mitigated
 Less Than Significant Impact
 No Impact

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

Impact Analysis: The activities posed under the variance are not expected to have any significant effects on the environment. Management activities, operation plans, an inspection program, emergency plans, and employee training requirements help ensure safe conditions during operations.

Conclusion:

- Potentially Significant Impact
 Potentially Significant Unless Mitigated
 Less Than Significant Impact
 No Impact

- 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 public or the environment.

Impact Analysis: The activities posed under the variance are not expected to have any significant effects on the environment. Management activities, operation plans, an inspection program, emergency plans, and employee training requirements help ensure safe conditions during operations.

Conclusion:

- Potentially Significant Impact
 Potentially Significant Unless Mitigated
 Less Than Significant Impact
 No Impact

- e. Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan.

Impact Analysis: The activities posed under the variance are not expected to have any significant effects on the environment. Management activities, operation plans, an inspection program, emergency plans, and employee training requirements help ensure safe conditions during operations.

Conclusion:

- Potentially Significant Impact
 Potentially Significant Unless Mitigated
 Less Than Significant Impact
 No Impact

8. Hydrology and Water Quality

Project Activities Likely to Create an Impact: None

Description of Baseline Environmental Conditions: The excavation or placement of lead-contaminated soil will take place within existing highway right-of-way. The activities allowed by this variance will not be within or adjacent to stream channels, other bodies of water, or 100-year flood plains, except where approved after separate project level evaluation under CEQA and other applicable law, with application of appropriate mitigation or preventive measures.

To prevent contaminated run-off, Caltrans will be required to install permanent erosion control features concurrently with or immediately following grading and or placement operations. Special provisions for covering or protecting stockpiles of lead-contaminated soil will be included in contracts where immediate placement will not take place. Any spillage resulting from hauling operations along or across the traveled way will be removed immediately by the contractor.

Lead is relatively insoluble in soils at near-neutral pH levels. Sampling by Caltrans has found pH levels of 6 to 8 in roadside soil, which are near neutral pH levels. While the lead is in soil, it possesses physical and chemical characteristics that render it insignificant as a hazard to human health and safety. When it leaches out into water, however, it may have certain adverse effects. Therefore, the variance contains conditions that require actions specifically for groundwater and surface water protection.

Analysis as to whether or not project activities would:

- a. Violate any water quality standards or waste discharge requirements.

Impact Analysis: The issuance of the variance will allow reuse of lead contaminated soil within existing State-owned highway right-of-way for various projects undertaken by Caltrans. As explained in the Project Description, each individual reuse project will undergo a specific environmental review during that project's approval phase. There are no anticipated significant impacts to surface and groundwater other than those mentioned above and these impacts will be evaluated during the project-specific environmental review. Additionally, Caltrans will be required to notify the State Water Resources Control Board or a California Regional Water Quality Control Board before soil is managed pursuant to this variance. Finally, the variance MOA will require Caltrans and any future owners to conduct a number of long-term maintenance measures, such as inspecting and maintaining cover over the lead contaminated soil.

Conclusion:

- Potentially Significant Impact
 Potentially Significant Unless Mitigated
 Less Than Significant Impact
 No Impact

- b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficient 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).

Impact Analysis: The issuance of the variance will allow reuse of lead contaminated soil within existing State-owned highway right-of-way for various projects undertaken by Caltrans. As explained in the Project Description, each individual reuse project will undergo a specific environmental review during that project's approval phase. There are no anticipated significant impacts to surface and groundwater other than those mentioned above and these impacts will be evaluated during the project-specific environmental review. Additionally, Caltrans will be required to notify the State Water Resources Control Board or a California Regional Water Quality Control Board before soil is managed pursuant to this variance. Finally, the variance MOA will require Caltrans and any future owners to conduct a number of long-term maintenance measures, such as inspecting and maintaining cover over the lead contaminated soil.

Conclusion:

- Potentially Significant Impact
 Potentially Significant Unless Mitigated
 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, in a manner which would result in substantial erosion or siltation on or off-site.

Impact Analysis: The issuance of the variance will allow reuse of lead contaminated soil within existing State-owned highway right-of-way for various projects undertaken by Caltrans. As explained in the Project Description, each individual reuse project will undergo a specific environmental review during that project's approval phase. There are no anticipated significant impacts to surface and groundwater other than those mentioned above and these impacts will be evaluated during the project-specific environmental review. Additionally, Caltrans will be required to notify the State Water Resources Control Board or a California Regional Water Quality Control Board before soil is managed pursuant to this variance. Finally, the variance MOA will require Caltrans and any future owners to conduct a number of long-term maintenance measures, such as inspecting and maintaining cover over the lead contaminated soil.

Conclusion:

- Potentially Significant Impact
 Potentially Significant Unless Mitigated
 Less Than Significant Impact
 No Impact

- 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.

Impact Analysis: The issuance of the variance will allow reuse of lead contaminated soil within existing State-owned highway right-of-way for various projects undertaken by Caltrans. As explained in the Project Description, each individual reuse project will undergo a specific environmental review during that project's approval phase. There are no anticipated significant impacts to surface and groundwater other than those mentioned above and these impacts will be evaluated during the project-specific environmental review. Additionally, Caltrans will be required to notify the State Water Resources Control Board or a California Regional Water Quality Control Board before soil is managed pursuant to this variance. Finally, the variance MOA will require Caltrans and any future owners to conduct a number of long-term maintenance measures, such as inspecting and maintaining cover over the lead contaminated soil.

Conclusion:

- Potentially Significant Impact
 Potentially Significant Unless Mitigated
 Less Than Significant Impact
 No Impact

- e. Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff.

Impact Analysis: The issuance of the variance will allow reuse of lead contaminated soil within existing State-owned highway right-of-way for various projects undertaken by Caltrans. As explained in the Project Description, each individual reuse project will undergo a specific environmental review during that project's approval phase. There are no anticipated significant impacts to surface and groundwater other than those mentioned above and these impacts will be evaluated during the project-specific environmental review. Additionally, Caltrans will be required to notify the State Water Resources Control Board or a California Regional Water Quality Control Board before soil is managed pursuant to this variance. Finally, the variance MOA will require Caltrans and any future owners to conduct a number of long-term maintenance measures, such as inspecting and maintaining cover over the lead contaminated soil.

Conclusion:

- Potentially Significant Impact
 Potentially Significant Unless Mitigated
 Less Than Significant Impact
 No Impact

f. Otherwise substantially degrade water quality.

Impact Analysis: The issuance of the variance will allow reuse of lead contaminated soil within existing State-owned highway right-of-way for various projects undertaken by Caltrans. As explained in the Project Description, each individual reuse project will undergo a specific environmental review during that project's approval phase. There are no anticipated significant impacts to surface and groundwater other than those mentioned above and these impacts will be evaluated during the project-specific environmental review. Additionally, Caltrans will be required to notify the State Water Resources Control Board or a California Regional Water Quality Control Board before soil is managed pursuant to this variance. Finally, the variance MOA will require Caltrans and any future owners to conduct a number of long-term maintenance measures, such as inspecting and maintaining cover over the lead contaminated soil.

Conclusion:

- Potentially Significant Impact
 Potentially Significant Unless Mitigated
 Less Than Significant Impact
 No Impact

g. Place within a 100-flood hazard area structures which would impede or redirect flood flows.

Impact Analysis: The issuance of the variance will allow reuse of lead contaminated soil within existing State-owned highway right-of-way for various projects undertaken by Caltrans. As explained in the Project Description, each individual reuse project will undergo a specific environmental review during that project's approval phase. There are no anticipated significant impacts to surface and groundwater other than those mentioned above and these impacts will be evaluated during the project-specific environmental review. Additionally, Caltrans will be required to notify the State Water Resources Control Board or a California Regional Water Quality Control Board before soil is managed pursuant to this variance. Finally, the variance MOA will require Caltrans and any future owners to conduct a number of long-term maintenance measures, such as inspecting and maintaining cover over the lead contaminated soil.

Conclusion:

- Potentially Significant Impact
 Potentially Significant Unless Mitigated
 Less Than Significant Impact
 No Impact

h. 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.

Impact Analysis: The issuance of the variance will allow reuse of lead contaminated soil within existing State-owned highway right-of-way for various projects undertaken by Caltrans. As explained in the Project Description, each individual reuse project will undergo a specific environmental review during that project's approval phase. There are no anticipated significant impacts to surface and groundwater other than those mentioned above and these impacts will be evaluated during the project-specific environmental review. Additionally, Caltrans will be required to notify the State Water Resources Control Board or a California Regional Water Quality Control Board before soil is managed pursuant to this variance. Finally, the variance MOA will require Caltrans and any future owners to conduct a number of long-term maintenance measures, such as inspecting and maintaining cover over the lead contaminated soil.

Conclusion:

- Potentially Significant Impact
 Potentially Significant Unless Mitigated
 Less Than Significant Impact
 No Impact

i. Inundation by sieche, tsunami or mudflow.

Impact Analysis: The issuance of the variance will allow reuse of lead contaminated soil within existing State-owned highway right-of-way for various projects undertaken by Caltrans. As explained in the Project Description, each individual reuse project will undergo a specific environmental review during that project's approval phase. There are no anticipated significant impacts to surface and groundwater other than those mentioned above and these impacts will be evaluated during the project-specific environmental review. Additionally, Caltrans will be required to notify the State Water Resources Control Board or a California Regional Water Quality Control Board before soil is managed pursuant to this variance. Finally, the variance MOA will require Caltrans and any future owners to conduct a number of long-term maintenance measures, such as inspecting and maintaining cover over the lead contaminated soil.

Conclusion:

- Potentially Significant Impact
- Potentially Significant Unless Mitigated
- Less Than Significant Impact
- No Impact

9. Land Use and Planning

Project Activities Likely to Create an Impact: None

Description of Baseline Environmental Conditions: All activities allowed by this variance would take place on existing State-owned highway right-of-way within Caltrans Districts. These areas will continue to be designated as transportation corridors in the future. The variance activities will be consistent with this use. There are no land use or planning changes associated with the Project.

Analysis as to whether or not project activities would:

- a. 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.

Impact Analysis: All activities allowed by this variance would take place on existing State-owned highway right-of-way within Caltrans Districts. There are no anticipated significant effects or changes to land use or planning.

Conclusion:

- Potentially Significant Impact
- Potentially Significant Unless Mitigated
- Less Than Significant Impact
- No Impact

- b. Conflict with any applicable habitat conservation plan or natural community conservation plan.

Impact Analysis: All activities allowed by this variance would take place on existing State-owned highway right-of-way within Caltrans Districts. There are no anticipated significant effects or changes to land use or planning.

Conclusion:

- Potentially Significant Impact
- Potentially Significant Unless Mitigated
- Less Than Significant Impact
- No Impact

References Used:

10. Mineral Resources

Project Activities Likely to Create an Impact: None

Description of Baseline Environmental Conditions: Since the variance activities will be conducted in concert with projects that are either lane widening, additions of lanes in freeway medians, or interchange modifications that will be located in existing developed right-of-way, it is unlikely that there will be any impacts to mineral resources.

Analysis as to whether or not project activities would:

- 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.

Impact Analysis: This project will not result in use of any mineral resources other than already present. There are no anticipated significant impacts to mineral resources.

Conclusion:

- Potentially Significant Impact

- Potentially Significant Unless Mitigated
 Less Than Significant Impact
 No Impact

- 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.

Impact Analysis: This project will not result in use of any mineral resources other than already present. There are no anticipated significant impacts to mineral resources.

Conclusion:

- Potentially Significant Impact
 Potentially Significant Unless Mitigated
 Less Than Significant Impact
 No Impact

11. Noise

Project Activities Likely to Create an Impact: None

Description of Baseline Environmental Conditions: The construction activities would temporarily generate noise. The contractor would be required to comply with all local noise control regulations and ordinances. Additionally, each transportation project will be constructed in conformance with the appropriate local general plan noise elements. Issuance of the variance will not impact the normal excavation and soil transportation work activities associated with the highway project. Prior to the construction of the individual projects, all sensitive noise receptors will be identified and noise measurements will be taken at the most representative sites.

Feasible and reasonable noise mitigation will be considered for all locations for which the predicted noise levels approach or exceed the noise abatement criteria of 67 dBA (Leq), specified by the U.S. Federal Highway Administration as the maximum allowable noise level for residential areas. Mitigation will be in accordance with the Caltrans Highway Design Manual (Chapter 1100) and the U.S. Federal Highway Administration noise abatement procedures as provided in the Code of Federal Regulations (23 CFR 772).

Analysis as to whether or not project activities would:

- 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.

Impact Analysis: The approval of the variance will not increase noise level above normal highway construction level that would occur if the lead-contaminated soil was not reused. The reuse of lead-contaminated soil may create less noise than that which would be generated from vehicles hauling lead-contaminated soil to a Class I landfill. Because noise mitigation measures will automatically be considered for the construction projects, it is not anticipated that there be any significant impacts caused by the issuance of the variance.

Conclusion:

- Potentially Significant Impact
 Potentially Significant Unless Mitigated
 Less Than Significant Impact
 No Impact

- b. Exposure of persons to or generation of excessive groundbourne vibration or groundbourne noise levels.

Impact Analysis: The approval of the variance will not increase noise level above normal highway construction level that would occur if the lead-contaminated soil was not reused. The reuse of lead-contaminated soil may create less noise than that which would be generated from vehicles hauling lead-contaminated soil to a Class I landfill. Because noise mitigation measures will automatically be considered for the construction projects, it is not anticipated that there be any significant impacts caused by the issuance of the variance.

Conclusion:

- Potentially Significant Impact
 Potentially Significant Unless Mitigated
 Less Than Significant Impact

No Impact

- c. A substantial permanent increase in ambient noise levels in the vicinity above levels existing without the project.

Impact Analysis: The approval of the variance will not increase noise level above normal highway construction level that would occur if the lead-contaminated soil was not reused. The reuse of lead-contaminated soil may create less noise than that which would be generated from vehicles hauling lead-contaminated soil to a Class I landfill. Because noise mitigation measures will automatically be considered for the construction projects, it is not anticipated that there be any significant impacts caused by the issuance of the variance.

Conclusion:

- Potentially Significant Impact
- Potentially Significant Unless Mitigated
- Less Than Significant Impact
- No Impact

- d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

Impact Analysis: The approval of the variance will not increase noise level above normal highway construction level that would occur if the lead-contaminated soil was not reused. The reuse of lead-contaminated soil may create less noise than that which would be generated from vehicles hauling lead-contaminated soil to a Class I landfill. Because noise mitigation measures will automatically be considered for the construction projects, it is not anticipated that there be any significant impacts caused by the issuance of the variance.

Conclusion:

- Potentially Significant Impact
- Potentially Significant Unless Mitigated
- Less Than Significant Impact
- No Impact

12. Population and Housing

Project Activities Likely to Create an Impact: None

Description of Baseline Environmental Conditions: The project consists of the reuse of lead-contaminated soil during construction activities on existing, state owned right-of-way for the Caltrans. No changes to existing right-of-way that would impact local needs for housing or recreation are being proposed.

Analysis as to whether or not project activities would:

- a. Induce substantial population growth in area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).

Impact Analysis: No impacts on population, housing needs or recreation needs associated with the issuance of this variance are foreseen.

Conclusion:

- Potentially Significant Impact
- Potentially Significant Unless Mitigated
- Less Than Significant Impact
- No Impact

- b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.

Impact Analysis: No impacts on population, housing needs or recreation needs associated with the issuance of this variance are foreseen.

Conclusion:

- Potentially Significant Impact
- Potentially Significant Unless Mitigated
- Less Than Significant Impact

No Impact

- c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

Impact Analysis: No impacts on population, housing needs or recreation needs associated with the issuance of this variance are foreseen.

Conclusion:

- Potentially Significant Impact
 Potentially Significant Unless Mitigated
 Less Than Significant Impact
 No Impact

13. Public Services

Project Activities Likely to Create an Impact: None

Description of Baseline Environmental Conditions: The variance will allow Caltrans to use lead-contaminated soil on road projects within specified corridors within state owned highway right-of-way.

Analysis as to whether or not project activities would:

- a. Result in substantial adverse physical impacts associated with the provision of new or physically altered government 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 following public services:

- ❖ Fire protection
- ❖ Police protection
- ❖ Schools
- ❖ Parks
- ❖ Other public facilities

Impact Analysis: Activities allowed by this variance will not have an effect upon or result in a need for new or altered governmental services so there are no significant impacts to public services.

Conclusion:

- Potentially Significant Impact
 Potentially Significant Unless Mitigated
 Less Than Significant Impact
 No Impact

14. Recreation

Project Activities Likely to Create an Impact: None

Description of Baseline Environmental Conditions: The project consists of the reuse of lead-contaminated soil during construction activities on existing, state owned right-of-way for the Caltrans. No changes to existing right-of-way that would impact local needs for recreation are being proposed.

Analysis as to whether or not project activities would:

- 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.

Impact Analysis: No new recreation needs associated with the issuance of this variance are foreseen.

Conclusion:

- Potentially Significant Impact
- Potentially Significant Unless Mitigated
- Less Than Significant Impact
- No Impact

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

Impact Analysis: No new recreation needs associated with the issuance of this variance are foreseen.

Conclusion:

- Potentially Significant Impact
- Potentially Significant Unless Mitigated
- Less Than Significant Impact
- No Impact

15. Transportation and Traffic

Project Activities Likely to Create an Impact: None

Description of Baseline Environmental Conditions: The variance would apply to individual projects in highway and freeway corridors where construction projects will be completed to widen roads, add lanes, change interchange configurations, add Park & Ride facilities, and install pumping plant facilities to control surface drainage. These projects are part of the State Transportation Improvement Program or other transportation funding programs and are being conducted for traffic improvement and safety reasons.

Soil excavation will be needed because of the types of construction projects implemented. Projects where vehicle lanes are being added, sound walls constructed, interchanges modified or equipment installed will necessitate excavations. Traffic weight requires removal of native soil and replacement with aggregate base and sub base material. In some cases, the native soil can be treated to be reused. No extra excavation would occur other than that which is necessary for normal construction.

The variance would apply to two general categories of soil reuse. These activities would temporarily add truck traffic to an existing highway. Since the variance activities will be conducted in concert with projects that are either lane widening, additions of high occupancy vehicle lanes in the freeway medians, or interchange modifications which will be located in existing developed right-of-way, it is unlikely that there will be any significant impacts to transportation or circulation caused by approval of the variance.

In the first category, the need for fill soil is balanced by the amount of soil to be excavated. The project design shows where soil will be excavated and where it will be placed. Placement of fill would occur in embankments, interchanges, structural backfill, raised grades under Park & Ride lots, and under paved lanes or shoulders.

The second category of projects is those jobs where soil must be imported from outside the project boundaries, but within the highway corridor or connecting corridor. New interchange projects or improvements to large interchanges may need several thousand cubic yards of soil. Soil from many areas may be moved to a single location. Soil may also be moved to interchanges where space with restricted access is available to place extra soil.

Analysis as to whether or not project activities would:

a. Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections).

Impact Analysis: Since the variance activities will be conducted in concert with projects that are either lane widening, additions of high occupancy vehicle lanes in the freeway medians, or interchange modifications which will be located in existing developed right-of-way, it is unlikely that there will be any significant impacts to transportation or circulation. However, any effects to these resources will be addressed specifically when each individual reuse project is being developed by Caltrans.

Conclusion:

- Potentially Significant Impact
- Potentially Significant Unless Mitigated

- Less Than Significant Impact
- No Impact

- b. Exceed, either individually or cumulatively, a level of service standard established by the country congestion management agency for designated roads or highway.

Impact Analysis: Since the variance activities will be conducted in concert with projects that are either lane widening, additions of high occupancy vehicle lanes in the freeway medians, or interchange modifications which will be located in existing developed right-of-way, it is unlikely that there will be any significant impacts to transportation or circulation. However, any effects to these resources will be addressed specifically when each individual reuse project is being developed by Caltrans.

Conclusion:

- Potentially Significant Impact
- Potentially Significant Unless Mitigated
- Less Than Significant Impact
- No Impact

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

Impact Analysis: Since the variance activities will be conducted in concert with projects that are either lane widening, additions of high occupancy vehicle lanes in the freeway medians, or interchange modifications which will be located in existing developed right-of-way, it is unlikely that there will be any significant impacts to transportation or circulation. However, any effects to these resources will be addressed specifically when each individual reuse project is being developed by Caltrans.

Conclusion:

- Potentially Significant Impact
- Potentially Significant Unless Mitigated
- Less Than Significant Impact
- No Impact

- d. Result in inadequate emergency access.

Impact Analysis: Since the variance activities will be conducted in concert with projects that are either lane widening, additions of high occupancy vehicle lanes in the freeway medians, or interchange modifications which will be located in existing developed right-of-way, it is unlikely that there will be any significant impacts to transportation or circulation. However, any effects to these resources will be addressed specifically when each individual reuse project is being developed by Caltrans.

Conclusion:

- Potentially Significant Impact
- Potentially Significant Unless Mitigated
- Less Than Significant Impact
- No Impact

- e. Result in inadequate parking capacity.

Impact Analysis: Since the variance activities will be conducted in concert with projects that are either lane widening, additions of high occupancy vehicle lanes in the freeway medians, or interchange modifications which will be located in existing developed right-of-way, it is unlikely that there will be any significant impacts to transportation or circulation. However, any effects to these resources will be addressed specifically when each individual reuse project is being developed by Caltrans.

Conclusion:

- Potentially Significant Impact
- Potentially Significant Unless Mitigated
- Less Than Significant Impact
- No Impact

- f. Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).

Impact Analysis: Since the variance activities will be conducted in concert with projects that are either lane widening, additions of high occupancy vehicle lanes in the freeway medians, or interchange modifications which will be located in existing developed right-of-way, it is unlikely that there will be any significant impacts to transportation or circulation. However, any effects to these resources will be addressed specifically when each individual reuse project is being developed by Caltrans.

Conclusion:

- Potentially Significant Impact
 Potentially Significant Unless Mitigated
 Less Than Significant Impact
 No Impact

16. Utilities and Service Systems

Project Activities Likely to Create an Impact: None

Description of Baseline Environmental Conditions: The allowed activities of the variance will not result in the need for new systems or substantial alteration to any utilities. The variance will be implemented on freeway corridors where construction projects will be completed to widen roads, add high occupancy vehicle lanes, change interchange configurations, add Park & Ride facilities and install pumping plant facilities to control surface drainage.

Analysis as to whether or not project activities would:

- a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.

Impact Analysis: Because this project (the reuse of lead-contaminated soil) will not require the development of additional utilities, there are no significant impacts.

Conclusion:

- Potentially Significant Impact
 Potentially Significant Unless Mitigated
 Less Than Significant Impact
 No Impact

- 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.

Impact Analysis: Because this project (the reuse of lead-contaminated soil) will not require the development of additional utilities, there are no significant impacts.

Conclusion:

- Potentially Significant Impact
 Potentially Significant Unless Mitigated
 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.

Impact Analysis: Because this project (the reuse of lead-contaminated soil) will not require the development of additional utilities, there are no significant impacts.

Conclusion:

- Potentially Significant Impact
 Potentially Significant Unless Mitigated
 Less Than Significant Impact
 No Impact

- d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed.

Impact Analysis: Because this project (the reuse of lead-contaminated soil) will not require the development of additional utilities, there are no significant impacts.

Conclusion:

- Potentially Significant Impact
- Potentially Significant Unless Mitigated
- Less Than Significant Impact
- No Impact

- e. Result in determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the projects projected demand in addition to the providers existing commitments.

Impact Analysis: Because this project (the reuse of lead-contaminated soil) will not require the development of additional utilities, there are no significant impacts.

Conclusion:

- Potentially Significant Impact
- Potentially Significant Unless Mitigated
- Less Than Significant Impact
- No Impact

- f. Be served by a landfill with sufficient permitted capacity to accommodate the projects solid waste disposal needs.

Impact Analysis: Because this project (the reuse of lead-contaminated soil) will not require the development of additional utilities, there are no significant impacts.

Conclusion:

- Potentially Significant Impact
- Potentially Significant Unless Mitigated
- Less Than Significant Impact
- No Impact

- g. Comply with federal, state, and local statutes and regulations related to solid waste.

Impact Analysis: Because this project (the reuse of lead-contaminated soil) will not require the development of additional utilities, there are no significant impacts.

Conclusion:

- Potentially Significant Impact
- Potentially Significant Unless Mitigated
- Less Than Significant Impact
- No Impact

MANDATORY FINDINGS OF SIGNIFICANCE:

Based on evidence provided in this Initial Study, DTSC makes the following findings:

- a. The project has does not 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, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory.
- b. The project has does not have impacts that are individually limited but cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.

c. The project has does not have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly.

DETERMINATION OF APPROPRIATE ENVIRONMENTAL DOCUMENT:

Based on evidence provided in this Initial Study, DTSC makes the following determination:

The proposed project COULD NOT HAVE a significant effect on the environment. A **Negative Declaration** will be prepared.

The proposed project COULD HAVE a significant effect on the environment. However, 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.

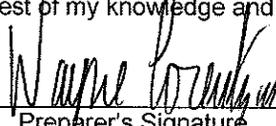
The proposed project MAY HAVE a significant effect on the environment. An **Environmental Impact Report** is required.

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.

The proposed project COULD HAVE a significant effect on the environment. However, all potentially significant effects (a) have been analyzed adequately in an earlier Environmental Impact Report or Negative Declaration pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier Environmental Impact Report or Negative Declaration, including revisions or mitigation measures that are imposed upon the proposed project. Therefore, nothing further is required.

CERTIFICATION:

I hereby certify that the statements furnished above and in the attached exhibits, present the data and information required for this initial study evaluation to the best of my ability and that the facts, statements and information presented are true and correct to the best of my knowledge and belief.


Preparer's Signature

4-29-09
Date

Wayne Lorentzen
Preparer's Name

Hazardous Substances Engineer
Preparer's Title

916-255-3883
Phone #

California State Highway System

Click on an area of the state for a more detailed map.





Alan C. Lloyd, Ph.D.
Agency Secretary
Cal/EPA



Department of Toxic Substances Control

8810 Cal Center Drive
Sacramento, California 95826-3200



Arnold
Schwarzenegger
Governor

MEMORANDUM

TO: Mr. David A. Wright, Chief
Permit Program Development Section
Hazardous Waste Management Program
1101 I Street, 12th Floor
Sacramento, California 95814

FROM: David L. Berry, Ph.D. *David L. Berry*
Senior Toxicologist
Human and Ecological Risk Division (HERD)
8810 Cal Center Drive, 2nd Floor
Sacramento, CA 95826-3200

DATE: August 25, 2005

SUBJECT: **Review of the CalTrans Variance for Lead Contaminated Soil Management and Disposal**

As requested, the Human and Ecological Risk Division (HERD) reviewed the August 14, 2001 memorandum from Stephen M. DiZio Ph.D. and the October 6, 1994 memorandum from James C. Carlisle, DVM concerning the existing variance granted to CalTrans for soil management of lead contaminated soils. The variance conditions developed for CalTrans addressed two levels of contamination as follows.

1. Hazardous soils containing less than 1575 mg/kg total lead and less than 500 µg/l of deionized-water-extractable lead could be re-used on CalTrans sites provided that there were at least two feet above the water table and covered by at least one foot of non-hazardous soil.
2. Hazardous soils containing less than 4150 mg/kg total lead and more than 500 µg/l of deionized-water-extractable lead could be re-used on CalTrans sites provided that there were at least two feet above the water table and covered by an impermeable cover such as a pavement structure or at least one foot of compacted clay.

HERD based these numbers on a Lead Risk Assessment Spreadsheet [LeadSpread] which was the basis for the October 6, 1994 memorandum. The modeled soil lead

EXHIBIT 2

David A. Wright, P.E.
August 25, 2005
Page 2

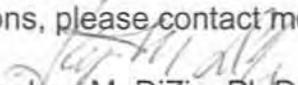
values were developed based on changing environmental concentrations of lead as well as changing state of science concerning physiological and behavioral parameters that determine exposures to environmental media such as soil. The blood lead level of concern has not changed in the eleven years since the original memorandum.

Using the latest information and the current LeadSpread model [LeadSpread 7], HERD would calculate the 95th percentile estimates of the maximum allowable total lead concentration of 1411 mg/kg for the first scenario and 3397 mg/kg for the second scenario. These estimates are for adults only. Spreadsheets showing these calculations are attached.

The newly estimated values do not differ significantly from the limits specified in the original variance. This opinion is based on (1) the general uncertainty in modeling exposure, and (2) the fact that the atmospheric lead concentrations used in the model are unrealistically high, in view of the decreasing atmospheric lead concentrations throughout California. The default atmospheric lead concentration value of 1.58 $\mu\text{g}/\text{m}^3$ used in the spreadsheet in the 1994, 2001, and current attachment is 56 time greater than the highest annual average atmospheric lead concentration reported at any monitoring station in California in 1997, the latest year for which we have complete data. Reducing the assumed atmospheric lead concentration to 1.15 $\mu\text{g}/\text{m}^3$ [still greater than current ambient levels as measured by the California Air Resources Board] would raise the lead soil limits for the two scenarios to the levels specified in the 1994 variance. From a scientific and technical point of view, the original variance conditions remain health-protective.

Concerning the conclusions in the 1994 memorandum [and the 2001 memorandum] about the deionized-water-extractable lead, distances from the water table, and nature of soil cover over the contaminated soil, HERD no longer possesses the resources to determine whether such parameters as are specified in the 1994 memorandum are representative of current groundwater protection. HERD recommends that any re-evaluation of Dr. Carlisle's 1994 conclusions be conducted by the Geological Services Branch within the Hazardous Waste Management Program.

If you have any questions, please contact me at 916-255-6626.

Reviewed by:  Stephen M. DiZio, Ph.D.
Division Chief, Human and Ecological Risk Division

LEAD RISK ASSESSMENT SPREADSHEET

CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL

USER'S GUIDE to version 7

INPUT	
MEDIUM	LEVEL
Lead in Air (ug/m ³)	1.58
(ug/g)	3397.0
Lead in Water (ug/l)	10
% Home-grown Produce	0%
(ug/m ³)	0

OUTPUT							
	Percentile Estimate of Blood Pb (ug/dl)					PRG-99	PRG-95
	50th	90th	95th	98th	99th	(ug/g)	(ug/g)
BLOOD Pb, ADULT	18.7	34.1	40.3	49.0	55.8	-9	276
BLOOD Pb, CHILD	27.3	50.0	59.1	71.8	81.8	14	195
BLOOD Pb, PICA CHILD	51.3	93.6	110.8	134.7	153.2	7	98
BLOOD Pb, OCCUPATIC	4.6	8.5	10.0	12.2	13.8	2069	3397

EXPOSURE PARAMETERS			
	units	adults	children
Days per week	days/wk	7	
Days per week, occupational		1.5	
Geometric Standard Deviation		1.6	
Blood lead level of concern (ug/dl)		10	
Skin area, residential	cm ²	#####	#####
Skin area occupational	cm ²	#####	
Soil adherence	ug/cm ²	500	200
Dermal uptake constant	(ug/dl)/(ug/cm ²)	0.0001	
Soil ingestion	mg/day	240	100
Soil ingestion, pica	mg/day		200
Ingestion constant	(ug/dl)/(ug/day)	0	0.2
Bioavailability	unitless	0.44	
Breathing rate	m ³ /day	20	6.8
Inhalation constant	(ug/dl)/(ug/m ³)	0.1	0.2
Water ingestion	l/day	1.4	0.4
Food ingestion	kg/day	1.9	1.1
Lead in market basket	ug/kg	3.1	
Lead in home-grown produce	ug/kg	1528.7	

PATHWAYS						
ADULTS	Residential			Occupational		
	Pathway contribution			Pathway contribution		
	Pathway	PEF	ug/dl	percent	PEF	ug/dl
Soil Contact	2.7E-4	0.93	5%	6.0E-5	0.20	4%
Soil Ingestion	4.2E-3	#####	77%	9.1E-4	3.07	66%
Inhalation, bkgnd		2.59	14%		0.56	12%
Inhalation	0.0E+0	0.00	0%	0.0E+0	0.00	0%
Water Ingestion		0.56	3%		0.56	12%
Food Ingestion, bkgnd		0.23	1%		0.23	5%
Food Ingestion	0.0E+0	0.00	0%			0%

CHILDREN	typical			with pica		
	Pathway contribution			Pathway contribution		
	Pathway	PEF	ug/dl	percent	PEF	ug/dl
Soil Contact	5.6E-5	0.19	1%		0.19	0%
Soil Ingestion	7.0E-3	#####	87%	1.4E-2	47.83	93%
Inhalation	0.0E+0	0.00	0%		0.00	0%
Inhalation, bkgnd		2.06	8%		2.06	4%
Water Ingestion		0.64	2%		0.64	1%
Food Ingestion, bkgnd		0.54	2%		0.54	1%
Food Ingestion	0.0E+0	0.00	0%		0.00	0%

[Click here for REFERENCES](#)

LEAD RISK ASSESSMENT SPREADSHEET

CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL

USER'S GUIDE to version 7

INPUT	
MEDIUM	LEVEL
Lead in Air (ug/m ³)	1.58
(ug/g)	1411.0
Lead in Water (ug/l)	10
% Home-grown Produ	0%
(ug/m ³)	0

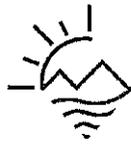
OUTPUT							
	Percentile Estimate of Blood Pb (ug/dl)					PRG-99	PRG-95
	50th	90th	95th	98th	99th	(ug/g)	(ug/g)
BLOOD Pb, ADULT	9.7	17.8	21.0	25.6	29.1	-9	276
BLOOD Pb, CHILD	13.3	24.2	28.7	34.8	39.6	14	195
BLOOD Pb, PICA CHILD	23.2	42.4	50.1	60.9	69.3	7	98
BLOOD Pb, OCCUPATIC	4.6	8.5	10.0	12.2	13.8	747	1411

EXPOSURE PARAMETERS			
	units	adults	children
Days per week	days/wk	7	
Days per week, occupational		3	
Geometric Standard Deviation		1.6	
Blood lead level of concern (ug/		10	
Skin area, residential	cm ²	####	####
Skin area occupational	cm ²	####	
Soil adherence	ug/cm ²	500	200
Dermal uptake consta	(ug/dl)/(ug/	0.0001	
Soil ingestion	mg/day	240	100
Soil ingestion, pica	mg/day		200
Ingestion constant	(ug/dl)/(ug/	0	0.2
Bioavailability	unitless	0.44	
Breathing rate	m ³ /day	20	6.8
Inhalation constant	(ug/dl)/(ug/	0.1	0.2
Water ingestion	l/day	1.4	0.4
Food ingestion	kg/day	1.9	1.1
Lead in market basket	ug/kg	3.1	
Lead in home-grown produc	ug/kg	635.0	

PATHWAYS						
ADULTS	Residential			Occupational		
	Pathway contribution			Pathway contribution		
	Pathway	PEF	ug/dl	percent	PEF	ug/dl
Soil Contact	2.7E-4	0.39	4%	1.2E-4	0.17	4%
Soil Ingestion	4.2E-3	5.96	61%	1.8E-3	2.55	55%
Inhalation, bkgrnd		2.59	27%		1.11	24%
Inhalation	0.0E+0	0.00	0%	0.0E+0	0.00	0%
Water Ingestion		0.56	6%		0.56	12%
Food Ingestion, bkgrnd		0.23	2%		0.23	5%
Food Ingestion	0.0E+0	0.00	0%			0%

CHILDREN	typical			with pica		
	Pathway contribution			Pathway contribution		
	Pathway	PEF	ug/dl	percent	PEF	ug/dl
Soil Contact	5.6E-5	0.08	1%		0.08	0%
Soil Ingestion	7.0E-3	9.93	75%	1.4E-2	19.87	86%
Inhalation	0.0E+0	0.00	0%		0.00	0%
Inhalation, bkgrnd		2.06	16%		2.06	9%
Water Ingestion		0.64	5%		0.64	3%
Food Ingestion, bkgrnd		0.54	4%		0.54	2%
Food Ingestion	0.0E+0	0.00	0%		0.00	0%

[Click here for REFERENCES](#)



Department of Toxic Substances Control

Maziar Movassaghi, Acting Director
5796 Corporate Avenue
Cypress, California 90630



Arnold Schwarzenegger
Governor



Linda S. Adams
Secretary for
Environmental
Protection

MEMORANDUM

TO: Wayne Lorentzen
Hazardous Substances Engineer
Brownfields and Environmental Restoration Program

FROM: Wendy W. Arano, PG *Wendy W. Arano*
Engineering Geologist
Geological Services Unit -Cypress

Alfredo Zanoria, CEG, CHG *Alfredo Zanoria*
Senior Engineering Geologist
Geological Services Unit - Cypress

DATE: April 23, 2009

SUBJECT: EXTRACTABLE LEAD CONCENTRATIONS FOR CALTRANS
STATEWIDE VARIANCE

PCA 24076 SITE CODE 900191 WP 50 WR# 640198

The Geological Services Unit (GSU) has been requested by the Brownfields and Environmental Restoration Program to provide recommendations for the concentrations of Extractable lead to be used in the Lead Contaminated Soil Variance for Caltrans' reuse of lead-contaminated soil.

Summary

The Caltrans Variance for lead-contaminated soil issued by DTSC applies specifically to soil normally classified as a hazardous waste due to its elevated lead concentrations. Elevated lead concentrations in soils along highways are largely attributable to the fallout of lead particulates emitted from the exhaust of automobiles during the period when leaded gasoline was widely used through the 1980s. Lead chloride and lead bromide were likely the major portion of the particulate lead compounds in fresh automobile exhaust; subsequent to decomposition and interaction with soil, lead compounds in soil consist mainly of lead oxides, lead carbonates, and lead sulfates. Many of these lead compounds are weakly soluble, but may be considered immobile when considered over the lifetime of a highway. The task of the GSU was to evaluate approaches for establishing a soluble lead threshold in soil that would be protective of groundwater based on the current drinking water standard for lead. To meet this task, the GSU

EXHIBIT 3

reviewed various studies on lead and its mobility; evaluated soil analytical data from various Caltrans highway construction projects; and utilized mathematical algorithms for predicting lead attenuation during vertical transport in the vadose zone.

While lead-contaminated highway soils pose a significant threat to the public via direct exposure, the data from published studies as well as direct measurements of California soils indicate that lead is so tightly bound to the soil that the overall potential for leaching into groundwater is low. For soil having pH less than 5; the solubility of lead increases greatly. In accordance with these considerations, the GSU recommends that soil containing 1.5 mg/l or less of extractable lead may be reused in Caltrans projects provided that it is covered under at least one foot of nonhazardous soil and is a minimum of five feet above the groundwater table. Soil containing up to 150 mg/l extractable lead may only be used as fill under pavement structure. Additionally, lead containing soil with a pH less than 5.5 should be placed under pavement; soil with pH less than 5 may not be reused on Caltrans sites.

Lead Waste Classification and Thresholds

The Caltrans Variance for lead-contaminated soil issued by DTSC applies specifically to soil that is normally classified as a hazardous waste based solely on its lead concentrations. Lead-contaminated solid waste is considered hazardous when its total lead concentration equals or exceeds the Total Threshold Limit Concentration (TTLC) of 1,000 mg/kg, and/or when the soluble concentration equals or exceeds the Soluble Threshold Limit Concentration (STLC) of 5 mg/l. The TTLC and STLC are California waste standards specified in Title 22 of the California Code of Regulations (CCR), §66261.24.

The standard procedure for determining the soluble concentration is the Waste Extraction Test (WET), which specifies the use of citric acid as extractant and is intended to simulate the acidic conditions that are generated in most landfill leachates. The WET differs from the federal Toxicity Characteristic Leaching Procedure (TCLP) which uses acetic acid as the extractant.

The STLC for lead, 5 mg/l, was promulgated in 1984 to protect drinking water supplies and was based on the Maximum Contaminant Level (MCL) for lead, which was 0.05 mg/l at that time. The STLC was derived by applying a 100-fold attenuation factor to the MCL (DTSC, 1984).

The TTLC for lead (1,000 mg/kg) was based on the risk of exposure by ingestion for children with pica (DTSC, 1984).

Caltrans Variance Specifications

On September 22, 2000 DTSC issued the Caltrans Variance for Lead-Contaminated Soil specifying the allowable concentrations of extractable lead in soil that may be used as fill in Caltrans highway construction projects. Section 9(a) of the Caltrans Variance specified soluble lead concentrations in conditions 1 and 2 as follows:

1. Soil containing 500 ug/l extractible [sic] lead or less (based on a modified waste extraction test using deionized water as the extractant)... may be used as fill provided that the lead-contaminated soil is placed a minimum of five(5) feet above the maximum water table elevation and covered with at least one (1) foot of non hazardous soil.

And,

2. Soil containing more than 500 ug/l and less than 50 mg/l extractible [sic] lead (based on a modified waste extraction test using deionized water as the extractant)...may be used as fill provided that the lead-contaminated soils are placed a minimum of five (5) feet above the maximum water table elevation and protected from infiltration by a pavement structure which will be maintained by Caltrans.

This portion of the Variance specified the allowable concentration of leachable lead that is protective of groundwater under the following conditions:

- five (5) feet of elevation above the maximum water table,
- lead-contaminated soil is covered by one (1) foot of clean soil (Condition 1), or by a pavement cover (asphalt or concrete) maintained by Caltrans (Condition 2).
- soil with pH less than 5.0 may only be used as fill under pavement cover.

The threshold leachate concentrations of 0.5 mg/L (or 500 ug/L) for Condition 1, and 50 mg/L for Condition 2, were based on the drinking water standard (MCL) for lead at that time (0.05 mg/L). These threshold concentrations were derived by multiplying the drinking standard for lead by an Attenuation Factor (AF) of 10X for Condition 1 (one-foot clean soil cover), and 1,000X for Condition 2 (engineered pavement cover).

The extraction is based on a modified WET procedure that uses deionized water to simulate ambient conditions, instead of the citric acid in the standard WET method which was intended to simulate the pH of leachate in landfill settings.

(A separate Variance condition specifies a total lead concentration to protect sensitive surface receptors from accidental ingestion/inhalation/dermal contact with lead-contaminated soils. This memo does not address that part of the variance.)

The California Maximum Contaminant Level (MCL) for lead was rescinded in 1995 with the adoption of a regulatory action level. The "Lead and Copper Rule" specifies the current action level for lead in drinking water as 0.015 mg/l (Title 22 of the CCR, §64672.3)

The GSU's task is to evaluate the approach for establishing a soil threshold protective of groundwater based on the current drinking standard for lead that can be applied statewide at Caltrans highway construction projects. More specifically, the goal is to find an appropriate quantitative estimation of the Attenuation Factor assuming the lead-bearing leachate has to travel through five feet of clean soil before reaching the water table.

Lead Near Highways

Elevated lead concentrations in soils along highways are largely attributable to the fallout of lead particulates emitted from the exhaust of automobiles during the period when leaded gasoline was widely used. Lead alkyl compounds (eg. Tetraethyl lead) were first added to gasoline in the 1920's to aid in the combustion of the gasoline and prevent "knocking". To prevent the fouling of the combustion chamber with lead oxides that formed from the lead alkyls, ethylene dichloride and ethylene dibromide were also added to gasoline, which resulted in tailpipe emissions of lead halides. The U. S. EPA implemented a gradual phase-out of lead in gasoline beginning in 1973 and continuing through the 1980's. By 1988, the amount of lead used in gasoline was less than 1% of that used in 1970. Amendments to the Clean Air Act prohibited the sale of leaded gasoline for use in motor vehicles effective December 31, 1995 (DTSC, 2004).

Other potential sources of lead in soils near highways are tire balance weights, road paint, extraneous metal fragments, imported candy wrappers, etc.

Solubility and Sorption Characteristics of Lead

Elemental lead is generally considered insoluble and highly immobile. The halides lead chloride and lead bromide, that were likely the major portion of the particulate lead compounds in fresh automobile exhaust are considered to be weakly soluble in water. Photochemical decomposition may occur during air dispersion and after deposition, resulting in the formation of lead oxides. Additionally, it has been determined that oxides, carbonates, and sulfates may be the most prominent constituents of aged exhaust particles (Olson and Skogerboe, 1975). Interaction with the soil may result in further changes to the lead compounds.

Lead is known to adsorb readily onto soil constituent surfaces such as clay, oxides, hydroxides, oxyhydroxides, and organic matter. Lead adsorption studies on bulk soils indicate that the adsorption is strongly correlated with pH and the cation exchange capacity of the soil. Some studies of lead adsorption data indicated that properties affecting the cation exchange capacity of soil such as organic matter content, clay content, and surface area of soil particles have a greater affect on lead adsorption than soil pH (U.S. EPA, 1999).

The relationship between the fraction of contaminant bound to the soil and the fraction dissolved in soil moisture (water), at equilibrium, is described by the Partition Coefficient, K_d (U.S. EPA, 1996a and 1996b).

$$K_d = C_s / C_w$$

where

K_d = Soil/water partition coefficient (L/kg, or cm^3/g),

C_s = concentration sorbed on soil (mg/kg), and;

C_w = concentration of solution (mg/L).

K_d describes the degree to which a contaminant is bound to the soil relative to its dissolved fraction under equilibrium conditions. This property is specific to the contaminant, its concentration, age, and the condition of the soil that contains it. It is derived by conducting a leaching test and a total analysis of the soil sample, and then using the analytical results to calculate the K_d .

The lower the K_d value the greater the mobility of the contaminant in soil and the greater its ability to leach into groundwater. Contaminants with a K_d less than 1.0 are considered highly mobile and pose a significant threat to groundwater. Contaminants with K_d values greater than 20 indicate that it is tightly bound to soil and that it is essentially immobile and does not pose a significant leaching concern (Hawaii DOH, 2007).

The K_d value is an important parameter when simulating fate and transport in the vadose zone using soil leaching models (e.g., SESOIL). While it was common for early modelers to rely on published K_d values derived from other sites, there is now increasing preference to use site-specific K_d values when using soil leaching models to derive soil cleanup values protective of groundwater (Hawaii DOH, 2007, New Jersey DEP, 2008, and Wisconsin DNR, 2003).

Caltrans Data

At GSU's request, Caltrans provided soil analyses data from its highway construction projects. The soil data were from Caltrans District 4 (covering the counties of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano and Sonoma) and Caltrans District 7 (Los Angeles and Ventura counties). The data consisted of both total and soluble lead (DI-WET) analyses.

Part of the data set consisted of soil analyses from various depths within the same borehole location. In general, soluble lead content decreased rapidly in the soil column, often to non-detectable concentrations within 6 inches to 1 foot from grade. However, it was not possible to use the data to derive any reasonable estimation of the rate of attenuation because of inconsistent trends in soil concentration, the high possibility of soil disturbance, and the likelihood of multiple sources. Deriving an Attenuation Factor from such data would require the assumption that lead concentration from a lower soil sample is the result of leaching from an overlying soil sample. Caltrans data indicates that this assumption may not be valid in all locations.

The greatest utility of the data, however, was in providing a direct measurement of the sorption characteristic of the soil samples with regard to lead. Since the data included total lead and dissolved lead analyses for each sampling location, it was therefore possible to derive the Partition Coefficient, Kd.

Calculated Partition Coefficients (Kd) from Caltrans Construction Projects

Partition Coefficient Kd (L/kg)	District 4 n = 156	District 7 n = 439	District 4 & 7 n = 595
Mean	333	1,608	1,274
Std. Dev.	561	2,099	1,909
Minimum	10	43	10
Maximum	4,256	21,290	21,290

(For comparison, the EPA has published Kd values ranging from 150 to 44,580 over pH ranges from 4.0 to 11.0 [U.S. EPA, 1999])

The data indicates that Kd values in District 4 (mean Kd = 333) are significantly lower than those in District 7 (mean Kd = 1,608). This is likely related to the higher precipitation rate and therefore higher moisture content of soils in northern California,

which allows more opportunity for lead to partition into the dissolved phase. Furthermore, since northern California soils appear to be more sensitive to leaching, it is only appropriate to use them as basis for formulating a statewide Attenuation Factor.

The most notable observation, however, is that the measured Kd values are well above the recognized threshold for mobility, even for the relatively low Kd of District 4 soils (mean Kd = 333). As pointed out earlier, a Kd that is higher than 20 indicates the contaminant is so tightly bound to the soil that it is essentially immobile and does not pose a significant threat of leaching.

SESOIL Modeling

In an effort to generate a numerical estimate of the Attenuation Factor based on current understanding of vadose zone fate and transport processes, the GSU tried to run the SESOIL Model using the mean Kd derived from District 4 (333 L/kg). Utilizing default soil parameters, the model was run to simulate leaching through five feet of clean soil for a period of 100 years. However, it was immediately clear that the model is unable to provide the required result because of the very high Kd value. The high Kd results in extreme retardation of the solute front as it passes through the soil column, following the equation:

$$\text{Retardation Factor} = 1 + (P_b/\theta) (K_d) \quad (\text{Fetter, 1988, page 399})$$

where

P_b = dry bulk density of the soil,

θ = volumetric moisture content of the soil, and;

Kd = Soil/water partition coefficient.

Utilizing the default value of 1.5 g/cm³ for bulk density, moisture content of 0.2 and the District 4 mean Kd of 333 cm³/g results in a Retardation Factor of 2,498. Assuming a recharge rate of 12 inches/year, this suggests that it would take approximately 2,500 years for lead-bearing solute to migrate through one foot of unsaturated soil. This simplified model assumes that all the lead will eventually leach, and does not consider that some lead will permanently bind to soil constituents. On the other hand, it is also based on the assumption of soil homogeneity and isotropy (e.g., absence of preferred pathways).

Discussion and Recommendations

Widespread use of leaded automotive fuels through the 1980s has resulted in significant lead contamination of shallow soils on and near California's highways. Because of the

toxic nature of lead, there is no doubt that these lead-contaminated soils pose a threat to California residents who might ingest, inhale or be in direct contact with the soil. This aspect of the risk is being addressed in a separate portion of the Variance.

With regard to the potential for leaching into groundwater, however, various lines of evidence indicate that such risk is low. Most important are soil data collected from actual sites in California where Caltrans has conducted construction operations. Measurements of Partitioning Coefficients (K_d) from 595 soil samples indicate that lead, while prevalent, is so tightly bound to the soil that they do not pose a serious threat of leaching into the groundwater. The measured mean K_d of 333 from northern California soils is far above the recognized threshold of $K_d = 20$ for chemicals that are considered immobile and not a threat of leaching to groundwater.

This is consistent with the observation that there is no known association between the locations of heavily used highways and groundwater lead contamination. Where lead has been found to contaminate groundwater, it is often associated with landfills, lead smelting operations, battery recycling facilities, metal plating facilities, naturally mineralized areas, military-related burn and detonation areas, etc. In many cases where monitoring or production wells have detected low concentrations of lead, these are often attributed to defective well design and construction.

The state of New Jersey includes lead among a category of "Immobile Chemicals" (together with Aluminum, Copper, Vanadium, etc.) that are considered to be strongly adsorbed to soil and are, under certain conditions, not likely to impact groundwater. Soils contaminated by these "immobile chemicals" are not required to be remediated on the condition that there is at least two feet of separation between the soil contamination and groundwater. The selection of this class of "Immobile Chemicals" was based on a series of SESOIL simulations. (New Jersey DEP, 2008)

Although the GSU's effort to quantify the Attenuation Factor the SESOIL model was unsuccessful, it provided a clear indication of the extent to which lead is bound to the soil. It should also be noted that while mathematical algorithms are useful tools for predicting the behavior of contaminants in the environment, they are based on simplifying assumptions and therefore carry some inherent uncertainties.

While the GSU was unable to achieve a quantitative determination of an Attenuation Factor that is applicable statewide, there is strong evidence that it is at least an order of magnitude higher than the current than Attenuation Factor of 10x (condition 1, clean soil cover) and 1,000x (condition 2, pavement cover). Even if the current Attenuation Factors were raised by one order of magnitude, it remains sufficiently conservative in assuring that the impacted soils do not pose undue risk to our drinking water aquifers.

With regard to restrictions related to pH conditions of the soil, various studies have shown that lead does not readily migrate unless pH conditions are significantly less than 5.0.

Serrano-Belles and Leharne (1997) reported that leaching of lead near highways was dependent on the buffer capacity of the soil, but that lead was more rapidly released when soil pH was less than 4.0. It has also been shown that the highest Kd values are encountered under conditions of high pH and very low equilibrium lead concentrations, while the lowest Kd values are encountered under lower pH and higher lead concentrations (U.S. EPA, 1999). These studies indicate dramatic change in lead sorption when soil pH is between 6.0 and 4.0 (NWETC, 2006). Because of the significant degree of lead desorption that could occur in the lower pH range, it is necessary to impose a new restriction on the lowest pH of soils that may be used in Caltrans projects, even when the soil is placed under pavement cover.

Based on these considerations, the GSU makes the following recommendations:

1. Utilize the current drinking water Action Level for lead (0.015 mg/L) as the basis for calculating a new groundwater- protective soil standard at Caltrans construction projects.
2. Retain existing conditions that these soils may only be used as fill when separated by at least five feet of clean soil from the maximum water table.
3. For calculating the maximum allowable soluble lead concentration (DI-WET), modify the existing Attenuation Factors (10X and 1,000X) by increasing them by one order of magnitude (to 100X and 10,000X, respectively). Thus,

$$\text{Condition 1: } 0.015 \text{ mg/L} \times 100 = 1.5 \text{ mg/L}$$

$$\text{Condition 2: } 0.015 \text{ mg/L} \times 10,000 = 150 \text{ mg/L}$$

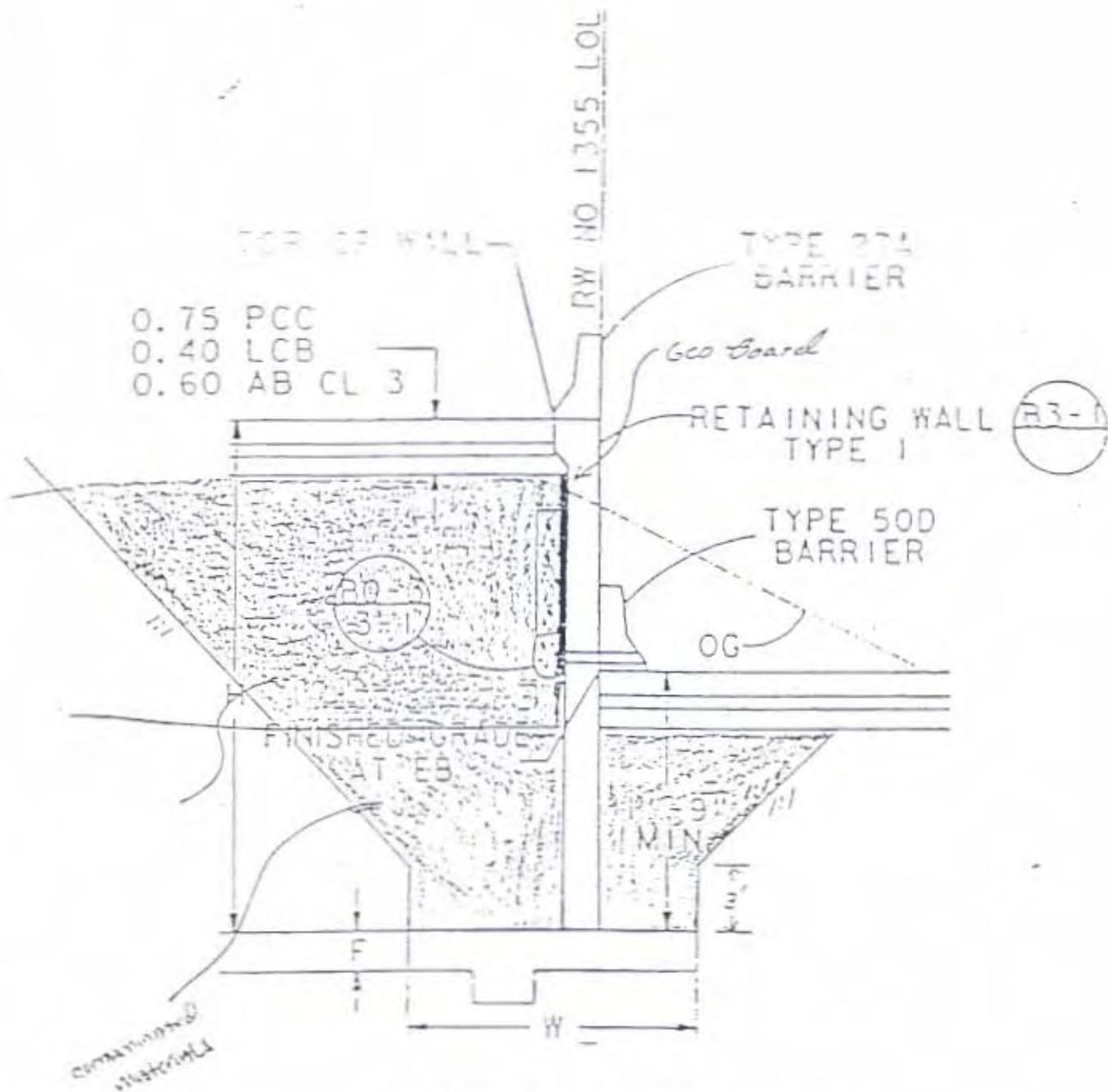
4. Soil with pH less than 5.5 should only be placed under pavement cover. Lead-containing soil with pH less than 5.0 may not be reused on Caltrans construction sites.
5. For the purpose of future potential revisions of the Variance, we recommend that Caltrans gather data utilizing the Synthetic Precipitation Leaching Procedure (EPA Method 1312), for conducting leaching tests to derive a site-specific Soil Partitioning Coefficient (Kd). The SPLP method is a variance of the DI-WET method that appears to be gaining wider acceptance in some states. The GSU will evaluate the data submitted to determine the appropriate leaching method to be used as a condition of the Variance.

This concludes the GSU recommendation. If you have any questions or comments please telephone Wendy Arano at (714) 484-5480, or e-mail at warano@dtsc.ca.gov.

Peer reviewed by: Laura Rainey, PG, Senior Engineering Geologist

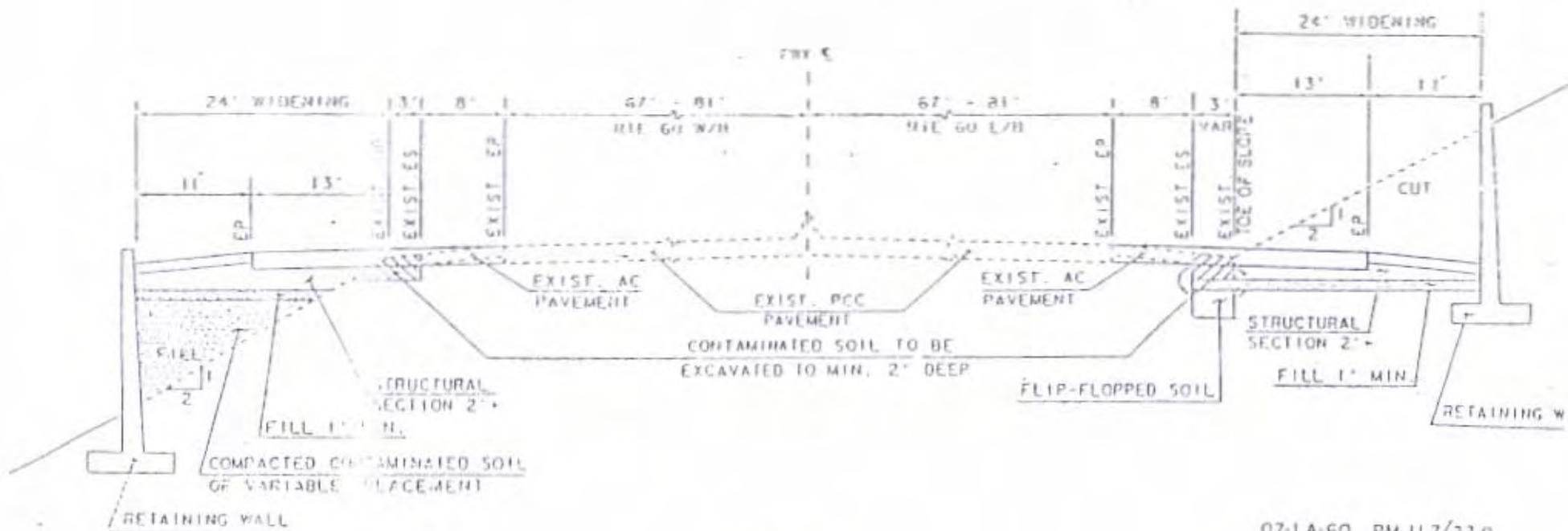
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TYPICAL SECTION

PROPOSED METHOD OF HANDLING CONTAMINATED SOIL



NO. SCALE

07-LA-60 PM.11.7/23.0
EA:129400

Caltrans District	County	Route	Project Description
01	DN	000	RECONSTRUCT GUARD RAILING
01	DN	101	CONSTRUCT RETAINING WALL (6 LOC)
01	DN	101	INSTALL OPEN GRADED FRICTION COURSE
01	DN	101	ROADWAY REHAB, GRADE RAISE & BRIDGE REPLACEMENT
01	DN	101	REMOVE & RECONSTRUCT HINGES @ SPANS 2, 8 & 11
01	DN	101	REPLACE BRIDGE
01	DN	101	YUROK TRIBE TRANSPORTATION CORRIDOR
01	DN	199	SHOULDER WIDENING & BRIDGE WIDENING /REPLACEMENT
01	DN	199	CONSTRUCT CABLE MESH DRAPERY SYSTEM
01	HUM	000	INFRASTRUCTURE UPGRADE (PHASE P)
01	HUM	036	REPAIR STORM DAMAGE
01	HUM	036	IMPROVE VERTICAL CURVEM EXCAVATE FAILED AC & SUBGRADE
01	HUM	036	REPAIR STORM DAMAGE
01	HUM	036	REPAIR STORM DAMAGE
01	HUM	36	WIDEN SHOULDERS
01	HUM	036	REPAIR STORM DAMAGE
01	HUM	096	CONSTRUCT SOLDIER PILE WALL
01	HUM	096	PERMANENT RESTORATION STORM DAMAGE- REPAIR ROADWAY SLIPOUT
01	HUM	096	PLACE HOT MIX ASPHALT OVERLAY
01	HUM	096	REPAIR ROADWAY AND DRAINAGE
01	HUM	096	REPAIR ROADWAY AND INSTALL GALLERY DRAINAGE WALLS
01	HUM	096	RECONSTRUCT ROADWAY, REPAIR SLOPE AND REPAIR DRAINAGE
01	HUM	101	CONSTRUCT INTERCHANGE AND FRONTAGE ROADS 36/101
01	HUM	101	PLACE RUBBERIZED HOT MIX ASPHALT TYPE O AND G AND LIGHTING.
01	HUM	101	INSTALL METAL BEAM GUARD RAIL
01	HUM	101	PLACE ROCK SLOPE PROTECTION
01	HUM	101	WETLAND MITIGATION
01	HUM	101	RECONSTRUCT GUARD RAILING
01	HUM	101	ROADWAY REHABILITATION
01	HUM	101	UPGRADE 4-LANE FACILITY
01	HUM	169	REPLACE BRIDGES(#4-304,305,306,307)
01	HUM	169	REPAIR STORM DAMAGE
01	HUM	169	REPAIR STORM DAMAGE
01	HUM	169	REPAIR STORM DAMAGE
01	HUM	169	INSTALL MBGR
01	HUM	254	REPAIR STORM DAMAGE
01	HUM	254	REPAIR STORM DAMAGE
01	HUM	254	REPAIR STORM DAMAGE
01	HUM	254	REPAIR STORM DAMAGE
01	HUM	254	REPLACE BRIDGE RAILS AND WIDEN (FOUR BRIDGES)
01	HUM	255	WETLAND MITIGATION
01	HUM	299	SOLDIER PILE TIE BACK WALL
01	HUM	299	REPAIR SLIDE AND UPGRADE DRAINAGE
01	HUM	299	INSTALL RUMBLE STRIPS
01	HUM	299	FISH & RIPARIAN MITIGATION (CULVERT REHABILITATION)
01	LAK	000	METAL BEAM GUARD RAIL
01	LAK	020	CONSTRUCT HISTORIC INTERPRETIVE CENTER
01	LAK	020	INSTALL ROUNDABOUT
01	LAK	029	WIDEN ROADWAY, ADD LEFT TURN & INTERSECTION LIGHTING
01	LAK	029	REPAIR SLIDE AND PLACE ROCK SLOPE PROTECTION.
01	LAK	029	UPGRADE TO 4 LANE EXPRESSWAY
01	LAK	053	ROADWAY REHABILITATION & SHO WIDEN
01	MEN	000	RECONSTRUCT GUARD RAILING
01	MEN	001	CONSTRUCT TIEBACK RETAINING WALL
01	MEN	001	REPAIR STORM DAMAGE
01	MEN	001	REPLACE BRIDGE (SCOUR)
01	MEN	001	MITIGATION-RESTORATION & MONITORING
01	MEN	001	MITIGATION:FISH PASSAGE/CULVERT REHAB
01	MEN	001	REPAIR STORM DAMAGE
01	MEN	001	REPAIR STORM DAMAGE
01	MEN	001	REPAIR STORM DAMAGE
01	MEN	001	REPAIR STORM DAMAGE
01	MEN	001	REPAIR STORM DAMAGE
01	MEN	001	PACIFIC COAST BIKE ROUTE PHASE II AND III
01	MEN	020	REPAIR STORM DAMAGE
01	MEN	20	CULVERT REHABILITATION
01	MEN	020	REPAIR STORM DAMAGE
01	MEN	101	REPAIR STORM DAMAGE
01	MEN	101	REPAIR STORM DAMAGE
01	MEN	101	REPAIR STORM DAMAGE
01	MEN	101	REPAIR STORM DAMAGE
01	MEN	101	REPAIR STORM DAMAGE
01	MEN	101	REPAIR STORM DAMAGE
01	MEN	101	CONSTRUCT 4-LANE FREEWAY, PHASE 1
01	MEN	101	REPAIR STORM DAMAGE
01	MEN	101	RECONSTRUCT GUARD RAILING
01	MEN	101	CULVERT REHABILITATION
01	MEN	101	REMOVE & REPLACE PORTLAND CONCRETE (PCC) PAVEMENT
01	MEN	128	REPAIR SLIPOUTS
01	MEN	128	REPAIR STORM DAMAGE
01	MEN	162	REPAIR STORM DAMAGE
01	MEN	162	REPAIR STORM DAMAGE
01	MEN	162	REPAIR STORM DAMAGE
01	MEN	162	REPAIR STORM DAMAGE
01	MEN	175	REPAIR STORM DAMAGE
01	MEN	222	REPLACE BRIDGE (SCOUR) OLD BR #10-0080
01	MEN	253	REPAIR STORM DAMAGE

Caltrans District	County	Route	Project Description
01	MEN	253	REPAIR STORM DAMAGE
01	MEN	253	REPAIR STORM DAMAGE
01	VAR	000	ARCHAEOLOGICAL SURVEY
01	VAR	000	PEDESTRIAN & BIKE SAFETY OUTREACH PROGRAM
02	LAS	139	CURVE IMPROVEMENT IRDAP #2226
02	LAS	395	SIGNS, FLASHING BEACONS AND TURN LANES
02	LAS	395	ASPHALT OVERLAY CAP-M
02	MOD	299	INSTALL HAR
02	MOD	299	WIDEN TO THREE LANES
02	PLU	070	EMERGENCY FIRE DAMAGE
02	PLU	070	REPLACE LT DAVIS SRRA
02	PLU	070	RELOCATE CROSSWALKS
02	PLU	070	REPLACE BRIDGE NO. 9-15
02	PLU	070	INSTALL MBGR PPNO #3266
02	PLU	089	CONSTRUCT TURNOUTS
02	PLU	089	BRIDGE REPLACEMENT - SCOUR #3215
02	PLU	089	GREENVILLE STREETScape
02	SHA	005	INSTALL MEDIAN BARRIER
02	SHA	005	INCREASE CURVE RADII
02	SHA	005	REHAB SOUTHBOUND SRRA
02	SHA	005	SEISMIC RETROFIT NORTH COTTONWOOD L&R, SWEETBRIAR, TUNNEL GULCH
02	SHA	005	CONSTRUCT AUXILLARY LANES, NB & SB
02	SHA	005	CENTRAL INTERCHANGE COLLECTOR DISTRIBUTOR - SOUTHBOUND
02	SHA	005	UPGRADE VISTA POINT
02	SHA	005	WIDEN TO 6 LANES
02	SHA	036	REPLACE MBGR, PLACE EROSION CONTROL CLEAR UNWANTED BRUSH
02	SHA	044	SHOULDER WIDENING
02	SHA	044	CURVE IMPROVEMENT
02	SHA	044	INSTALL LANDSCAPING AND IRRIGATION
02	SHA	273	INSTALL SIGNALS
02	SHA	299	REPAIR SLOPE
02	SHA	299	REALIGN CURVE
02	SHA	299	REALIGN CURVE
02	SHA	299	INSTALL SIGNALS
02	SHA	299	CONVENTIONAL & OPEN-GRADED ASPHALT OVERLAY
02	SHA	999	TREAT BRIDGE DECKS & REPLACE JOINT SEALS
02	SIS	003	INSTALL ADA RAMPS #2207
02	SIS	003	INSTALL LEFT TURN LANE AT JUNIPER DRIVE
02	SIS	005	EXPLORE OPERATIONAL IMPROVEMENTS TO RAMPS/I-5
02	SIS	005	MAINTAIN BRIDGES
02	SIS	005	REPLACE DECK 02-0123L & STRENGTHEN /SEISMIC RETROFIT 02-0123L/R
02	SIS	005	DECK REPLACEMENT, SEISMIC RETROFIT
02	SIS	096	INSTALL PRECAST CULVERTS
02	SIS	096	DRAINAGE SYSTEM RESTORATION
02	SIS	097	TURN LANE
02	SIS	999	TREAT BRIDGE DECK AND REPLACE JOINT SEALS
02	TEH	005	RECONSTRUCT INTERCHANGE
02	TEH	005	WEIGH IN MOTION SCALE IRDAP 2188
02	TEH	005	BRIDGE DECK MAINTENANCE, REPLACE PCC PAVEMENT
02	TEH	005	REBUILD N/B & S/B FACILITIES AT CORNING SRRA'S
02	TEH	005	INSTALL NATIVE LANDSCAPING
02	TEH	005	INTERCHANGE STUDY
02	TEH	032	REPAIR FIRE DAMAGE & IMPROVE DRAINAGE
02	TEH	099	SCOUR MITIGATION
02	TEH	099	INSTALL SIDEWALKS, CURB, GUTTERS, DECORATIVE LIGHTING & DRAINAGE
02	TEH	099	REPAIR BRIDGE SCOUR
02	TRI	003	BRIDGE REHAB OR REPLACE - SCOUR CRITICAL #3248
02	TRI	003	HAYFORK II TE
02	TRI	299	CONSTRUCT PASSING LANES AND CHAIN ON AREA
02	TRI	299	WIDEN SHOULDERS
02	TRI	299	WIDEN AND CONSTRUCT BARRIER
02	TRI	299	TRAFFIC CALMING TE
02	TRI	299	RAIL UPGRADE, WIDEN
02	TRI	299	UPPER BUCKHORN REALIGNMENT
03	BUT	070	APPLY EROSION CONTROL, PLACE DEBRIS RACKS AT CULVERTS, AND REMOVE TREE
03	BUT	070	DECK METH & JOINT REPLACE/REPAIR
03	BUT	070	ASPHALT CONCRETE DITCH AND PAVING
03	BUT	070	SEISMIC RETROFIT
03	BUT	070	CONST PASSING LANES
03	BUT	070	SEISMIC RETROFIT
03	BUT	070	UPGRADE GUARDRAIL AND GORE AREAS
03	BUT	99	BASE REPAIR, WIDEN & AC OVERLAY (HGS-LAB)
03	BUT	099	REPLACE BRIDGE (SCOUR)
03	BUT	162	INSTALL ADA CURB RAMPS
03	BUT	162	INSTALL TRAFFIC SIGNAL
03	COL	005	UPGRADE MBGR END TREATMENTS
03	COL	005	INSTALL CMS & CCTV CHANGEABLE MESSAGE SIGNS & CLOSED
03	COL	020	RECONSTRUCT EMBANKMENT SLOPE RECONSTRUCT SHLDR, REPL GUARDRAIL
03	ED	049	WIDEN AND ADD SHOULDERS
03	ED	050	REMOVE FAILED VERGLIMIT AC, REPAVE WITH AC
03	ED	050	CONSTRUCT HOV LANES BY ADDING ADDITIONAL LANES IN THE MEDIAN
03	ED	050	STORM WATER QUALITY IMPROVEMENTS OVERLAY, WIDEN SHLDR, RPL CULVERTS
03	ED	050	STORM WATER QUALITY IMPROVEMENTS OVERLAY, WIDEN SHLDR, REPL CULVERTS
03	ED	050	STORM WATER QUALITY IMPROVEMENTS OVERLAY, REPL CULVERTS, ADD BASINS
03	ED	050	WATER QUALITY IMPROVEMENTS
03	ED	050	MITIGATION PLANTING

Caltrans District	County	Route	Project Description
03	ED	050	CULVERT REHABILITATION
03	ED	050	ADD CURB,GUTTER,SIDEWALK & BIKE LN
03	ED	050	UPGRADE ROCK RETAINING GUARD WALL AND STORM WATER MITIGATION
03	ED	050	IMPROVE WILDLIFE CROSSINGS
03	ED	050	STORM WATER MITIGATION
03	ED	089	STORM WATER QUALITY IMPROVEMENTS O/L, RSP, WIDEN SHLDR, RPL CULVERTS
03	ED	089	STORM WATER QUALITY IMPROVEMENTS O/L, WIDEN, ADD DIKES & RET BASINS
03	ED	089	STORM WATER QUALITY IMPROVEMENTS O/L, ADD DIKES AND RETENTION BASINS
03	GLE	005	ASPHALT CONCRETE OVERLAY
03	GLE	005	REPLACE METAL BEAM GUARD RAILS
03	NEV	20	CONST NEW INTERCHG & AUX LANES (MSF-ACM)
03	NEV	020	AC REMOVAL AND POLYESTER OVERLAY
03	NEV	49	WIDEN TO 4 LNS WITH CONT LEFT TURN
03	NEV	080	REPLACE BUILDING
03	NEV	080	STORM WATER MANAGEMENT
03	NEV	080	REHAB & UPGRADE TRUCK INSP FACILITY FACILITY
03	NEV	080	DECK REHAB, JOINT SEALS, APPROACH SLABS
03	NEV	089	WIDEN UNDERPASS
03	PLA	028	INSTL CURB,GTRS,SDWLK,SGNL & DRAIN
03	PLA	080	RECONSTRUCT INTERCHANGE
03	PLA	080	CONSTRUCT AUXILIARY AND HOV LANES
03	PLA	080	CONSTRUCT HOV LANES
03	PLA	080	REHABILITATE CULVERTS
03	PLA	080	INSTALL CABLE NET DRAPERY
03	PLA	080	POLYESTER OVERLAY AND REPLACE SELECT BRIDGE RAILING
03	PLA	080	VERTICAL CLEARANCE FOR PERMIT VEH
03	PLA	080	INSTALL CONCRETE MEDIAN BARRIER
03	PLA	080	POLYESTER OVERLAY, JOINT SEALS
03	PLA	089	INSTALL INTELLIGENT TRANS SYS (ITS) TRAFFIC OPS ELEMENTS (TOS) INCLUDE
03	PLA	089	REHAB PAVEMENT AND DRAINAGE SYSTEM ENV IMPR PROGRAM PROJECT (EIP)
03	PLA	089	LANDSCAPE, PATH, PAVING ALICE RICHARDSON VISTA PT
03	PLA	267	PLANT ESTABLISHMENT AND PROTECTION
03	PLA	267	WATER QUALITY DRAINAGE IMPROVEMENT
03	PLA	267	REPAIR CUT SLOPES, PLACE RSP REPAIR/REPLACE CULVERTS & AC DIKE
03	SAC	000	FIRE AND LIFE SAFETY UPGRADE
03	SAC	005	INSTALL TMS UNITS
03	SAC	050	CONCRETE MEDIAN BARRIER AND OVERHED SIGNS
03	SAC	050	UPGRD METAL MED BARRIER TO CONCRETE
03	SAC	050	METHACRYLATE & REPLACE JOINT SEALS
03	SAC	050	CONSTR HOV LANES,COMMUNITY ENHANCE ENHANCEMENTS
03	SAC	050	EASTBOUND RAMP METERING
03	SAC	050	RAMP METERING AND WIDENING
03	SAC	51	REPLACE PLANTING & UPGRD IRRIGATION
03	SAC	080	INSTALL FLASHING BEACONS AND RADAR SPEED SIGNS,MODIFY SIGNAL HEADS
03	SAC	080	UPGRADE MBGR END TREATMENTS ON NON-NHS ROUTES TO 350 STDS
03	SAC	099	CONSTRUCT LANE EXTENSIONS
03	SAC	099	CONSTRUCT INTERCHANGE(FULL SQUARE PARTIAL CLOVERLEAF) (DKJ-MMM)
03	SAC	099	INSTALL NATIVE PLANTING
03	SAC	104	REPLACE BRIDGE RAIL, PEDESTRIAN SIGNAL HEADS AND SIDEWALK/CURB
03	SAC	160	REPAIR DOLPHIN FENDER SYSTEM
03	SIE	089	INSTALL WILDLIFE CROSSING (CULVERT) CULVERT WILL ACT AS A WILDLIFE XIN
03	SUT	020	SUB-SCOUR MITIGATION
03	SUT	099	MODIFY TRAFFIC SIGNAL
03	SUT	99	CONSTRUCT INTERCHANGE (TJC-)
03	SUT	099	REMOVE AND REPLACE OGAC
03	YOL	005	PLANT ESTABLISHMENT AND PROTECTION
03	YOL	005	AC OVERLAY, WITH JOINT HEADER POLYESTER OVERLAY
03	YOL	5	CONSTR N/B 15 TO S/B 113 CONNECTOR
03	YOL	016	INSTALL TRAFFIC SIGNAL
03	YOL	016	WIDEN SH & CONSTR LEFT TURN LANE RT TRN POCKETS, INTERSEC IMPROVEMNT
03	YOL	050	IMPROVE BRIDGE DRAINAGE
03	YOL	080	RECONSTRUCT EMBANKMENT
03	YUB	020	REMOVE MEDIAN LANES AND INSTALL LEFT TURN LANES AND
03	YUB	070	REHAB BRIDGE DECK & REPLACE JOINTS
04	ALA	000	CONSTRUCTION OF BUILDING & ROADS RENNOVATION OF EXISTING KEY SYSTEM
04	ALA	013	TREAT BRIDGE DECKS
04	ALA	013	REALIGN WESTBOUND ROUTE 24 TO NORTHBOUND ROUTE 13 CONNECTOR
04	ALA	013	REMOVE GORE SIGNS AND REPLACE WITH OVERHEAD SIGNS - PHASE II
04	ALA	013	STORM WATER MITIGATION
04	ALA	024	CONSTRUCT A 2-LANE BORE NORTH OF EXISTING THREE BORES
04	ALA	024	WIDENING OF CALDECOTT LANE AT KAY STREET OVERCROSSING AND INSTALLATIO
04	ALA	024	ROADWAY PLANTING
04	ALA	024	REPLACE UNDERGROUND STORAGE TANKS
04	ALA	080	INSTALL TRAFFIC OPERATIONS SYSTEMS (TOS) FIELD ELEMENTS.
04	ALA	80	CONSTRUCT BIKEWAY
04	ALA	080	STORM WATER MITIGATION
04	ALA	084	WIDEN ROADWAY AND RELOCATE UTILITIES
04	ALA	84	REALIGN & IMPROVE SIGHT DISTANCE
04	ALA	084	IMPROVE SIGHT DISTANCE, UPGRADE SHOULDERS AND PROVIDE CURVE CORRECT
04	ALA	084	REPLACE BRIDGE
04	ALA	238	ROADWAY REHABILITATION
04	ALA	260	REPAIR HANDRAIL AND SIDEWALK ALONG POSEY AND WEBSTER TUBES AND OTHER
04	ALA	262	UPPR,WIDENING OF ROUTE 262,AND COMP CONST. OF KATO RD ON AND OFF RAMP.
04	ALA	580	TREAT BRIDGE DECK WITH METHACRYLATE AND REPLACE JOINT SEALS
04	ALA	580	CONSTRUCT NEW INTERCHANGE
04	ALA	580	CONSTRUCT HOV LANES

Caltrans District	County	Route	Project Description
04	ALA	580	CONSTRUCT MEDIAN BARRIER
04	ALA	580	CONSTRUCT AUXILIARY LANES
04	ALA	580	STRUCTURE REHABILITATION
04	ALA	580	REPAIR PAVEMENT
04	ALA	580	CONSTRUCT I-580 WB HOV LANE, INCLUDE AUXILIARY LANES AND TSM IMPROVMNTS
04	ALA	580	REPAIR AND EXTEND PAVEMENT
04	ALA	580	STORM WATER MITIGATION
04	ALA	580	INSTALL ROCK SLOPE PROTECTION AND ROCK SLOPE PROTECTION FABRIC, RE-
04	ALA	580	CONSTRUCT SOUNDWALL ON I-580 EB
04	ALA	680	ENVIRONMENTAL MITIGATION
04	ALA	680	WIDEN BRIDGES AND ROADWAY
04	ALA	680	WIDENING AND ROADWAY REHABILITATION
04	ALA	680	WIDEN FREEWAY, CONSTRUCT AUXILIARY LANES, & INSTALL RAMP METERS
04	ALA	680	WIDENING AND REHABILITATE PAVEMENT
04	ALA	680	REPLACE WEIGHT DISPLAY AND ROOF REPLACEMENT
04	ALA	680	CONST NB HOV LANE, AUXILIARY LANES, INSTALL RAMP METERING AND WIDEN
04	ALA	880	REPLACE BRIDGES, CONSTRUCT ROADWAY, RETAINING WALLS, AND PUMPING PLANT
04	ALA	880	STRUCTURE REHABILITATION
04	ALA	880	REPLACE FIRE DAMAGED PAVEMENT AND CONCRETE BARRIER
04	ALA	880	REPLACE SB CMS SIGNS, INSPECT LIGHTINGS & SECURE CAMERAS
04	ALA	880	POLYESTER CONCRETE OVERLAY
04	ALA	880	EXTEND EXISTING HOV LANE
04	ALA	880	STORM WATER MITIGATION
04	ALA	880	STORM WATER MITIGATION
04	ALA	880	MODIFY INTERCHANGE AND CONSTRUCT SOUNDWALLS FOR SAFETY IMPROVEMENTS
04	CC	004	INSTALL MEDIAN BUFFER ZONE AND UPGRADE SHOULDERS
04	CC	004	UPGRADE TRAFFIC BARRIER AND GUARDRAIL END TERMINALS AT VARIOUS
04	CC	024	INSTALL DOWNDRAIN, GRADING AND REPLACE FAILED CULVERT
04	CC	580	BRIDGE DECK REPLACEMENT
04	CC	680	
04	CC	680	BRIDGE REHABILITATION
04	MRN	001	INSTALL ROCK SLOPE PROTECTION.
04	MRN	001	REPLACE ASPHALT CONCRETE SURFACING
04	MRN	001	INSTALL RSP AND DRAINAGE SYSTEM, RE-SET GUARD RAILING
04	MRN	001	CONSTRUCT A SOLDIER PILE RETAINING WALL
04	MRN	001	REPLACE GURADRAIL, RECONNECT DOWN DRAIN, INSTALL ROCK SLOPE PROTECTION
04	MRN	001	REMOVE DEBRIS, REPLACE CULVERT AND ROCK SLOPE PROTECTION
04	MRN	001	CONSTRUCT SOLDIER PILE/TIE BACK RETAINING WALL
04	MRN	001	REMOVE RIP-RAP AND REFLECTOR, INSTALL EMBANKMENT SYSTEM AND
04	MRN	001	REBUILD SLOPE, INSTALL ROCK SLOPE PROTECTION, RECONNECT DOWNDRAIN,
04	MRN	001	CONSTRUCT TIE-BACK WALL
04	MRN	001	CONSTRUCT TIE-BACK WALL
04	MRN	001	REPAIR WASH OUT BY REMOVING TEMP RSP AND RECONSTRUCT EMBANKMENT
04	MRN	037	TRAFFIC CONROL, DEWATERING, CLEANUP REBUILD LEVEE UNDER THE BRIDGE
04	MRN	101	RE-GRADING PAVEMENT AT ACCESSIBLE PARKING SPACES, RE-CONSTRUCT THE
04	MRN	101	INSTALL ROCK SLOPE PROTECTION (RSP)
04	MRN	101	CONSTRUCT NB HOV LANE FROM RTE 37 TO ATHERTON AVE AND A SB HOV LANE
04	MRN	101	CONSTRUCT INTERCHANGE ON RTE 101 AT SAN ANTONIO RD; INCLUDING FRONTAGE
04	MRN	101	INSTALL MISSION BELL MARKERS
04	MRN	101	VEGETATION MANAGEMENT PHASE II
04	MRN	101	INSTALL ROCK SLOPE PROTECTION
04	MRN	101	REALIGN ROUTE 101 AT SAN ANTONIO CURVE
04	MRN	131	REPAIR SLIPOUT AND IMPROVE DRAINAGE
04	NAP	012	CONSTRUCT TWO ADDITIONAL LANES FOR THE EASTBOUND DIRECTION, ADD A
04	NAP	012	CONTRUCT THE WESTBOUND FACILITY TO THE ULTIMATE CONFIGURATION
04	NAP	029	TREAT BRIDGE DECKS WITH METHACRYLATE AND REPLACE JOINT
04	NAP	029	CLEAN DEBRIS, CONSTRUCT RSP AND DRAINAGE SYSTEM
04	NAP	029	LEFT TURN CHANELIZATION AND PAVEMEN REHABILITATION
04	NAP	029	RECONSTRUCT SLOPE AND REPLACE CULVERT
04	NAP	029	CONSTRUCT SOUTHBOUND FLYOVER FROM RTE 221 TO RTE 29/12
04	NAP	029	INTERSECTION IMPROVEMENTS INCLUDING UPGRADING I/S TO I/C
04	NAP	121	REPLACE BRIDGE
04	NAP	121	REALIGN CURVES AND INTERSECTIONS, AND LEFT TURN LANES AND WIDEN
04	NAP	121	REPLACE BRIDGE (SCOUR)
04	NAP	121	BRIDGE REPLACEMENT (SCOUR)
04	NAP	128	INSTALL HORIZONTAL DRAINS
04	NAP	128	CONSTRUCT SHEET PILE WALL
04	SCL	009	INSTALL CENTERLINE RUMBLE STRIP
04	SCL	009	IMPROVE SIGHT DISTANCE, UPGRADE SHOULDERS, AND PROVIDE MINOR
04	SCL	009	CONSTRUCT TIE-BACK WALL
04	SCL	017	REPAIR MEDIAN BARRIER
04	SCL	017	WET PAVEMENT CORRECTION (CONSTRUCT DRAINAGES SYS, MED CONCRETE BARRIER
04	SCL	025	UPGRADE RAILROAD GRADE CROSSING
04	SCL	082	TREAT BRIDGE DECKS
04	SCL	085	UPGRADE EXISTING MEDIAN BARRIER
04	SCL	085	HEAVING PAVEMENT AC LEVELING AND GRINDING
04	SCL	087	WIDEN FREEWAY FROM 4 LANES TO 6 LANES
04	SCL	101	REHABILITATE PAVEMENT
04	SCL	101	REHABILITATION PAVEMENT
04	SCL	101	TREAT BRIDGE DECKS
04	SCL	101	REPAIR CHP WEIGH/INSPECTION STATION
04	SCL	101	INSTALL DRAINAGE AND GROUTING
04	SCL	101	US 101 IMPROVEMENTS CONSTRUCT ONE ADDITIONAL LANE IN SB
04	SCL	101	BRIDGE RAIL REPLACEMENT/UPGRADE
04	SCL	101	LANDSCAPING WORK
04	SCL	101	CONSTRUCT AUXILIARY LANES

Caltrans District	County	Route	Project Description
04	SCL	101	INSTALL RSP
04	SCL	101	RECONSTRUCT SLOPE WITH GEOGRID AND SEAL CRACKED WINGWALL
04	SCL	152	CONSTRUCT LEFT TURN POCKET AT PRUNEDALE AVENUE EASTBOUND
04	SCL	152	INSTALL SOFT MEDIAN BARRIER WIDEN THE RIGHT SHOULDERS
04	SCL	152	IMPROVE SIGHT DISTANCE, UPGRADE SHOULDERS, MINOR REALIGNMENT, TURN-
04	SCL	152	CONSTRUCT ROUNDABOUT ON RTE 152 AT FERGUSON RD INTERSECTION
04	SCL	152	IMPROVE SIGHT DISTANCE, UPGRADE SHOULDERS, AND PROVIDE MINOR
04	SCL	152	CONSTRUCT LEFT TURN POCKET
04	SCL	152	PLANTING AND ENVIRONMENTAL MITIGATION
04	SCL	280	REHABILITATE ROADWAY
04	SCL	880	WIDEN FROM 6 TO 8 LANES FOR HOV
04	SF	080	REPLACE 15KV WIRING AND INSTALL SECURITY SYSTEM
04	SF	101	REPLACE JOINT SEALS, APPLY METHACRYLATE, PATCH SPALLS, CLEAN
04	SF	101	REHABILITATE BRIDGE DECKS, DRAINAGE IMPROVEMENTS AND SUPERSTRUCTURE RE
04	SF	101	PROVIDE MAINTENANCE VEHICLE PULLOUTS AND RELATED ITEMS AT
04	SF	101	RECONST AND WIDEN EXIST DOYLE DRIVE
04	SF	280	BRIDGE REHABILITATION REPAIR FOR DRAINAGE & PONDING
04	SF	280	REPLACE BRIDGE HINGES
04	SF	280	REPLACE BRIDGE RAILS
04	SM	000	UPGRADE EXISTING ATTENUATORS
04	SM	001	WETLAND MITIGATION
04	SM	001	TREAT BRIDGE DECK WITH METHACRYLATE AND REPLACE/REPAIR JOINT SEALS
04	SM	1	EXTEND TWO-WAY LEFT TURN
04	SM	001	MITIGATION. SOIL COVER & VEGETATION OVER RSP. REPLACE STAIRS, CONSTRUCT
04	SM	001	UPGRADE TRAFFIC BARRIER AND GUARDRAIL END TERMINALS
04	SM	1	WIDEN FOR OPERATIONAL IMPROVEMENTS
04	SM	001	REPLACE FAILED CULVERT AND INSTALL RSP
04	SM	001	INSTALL RSP
04	SM	001	INSTALL SOFT MEDIAN BARRIER
04	SM	035	REPAIR DRAINAGE SYSTEMS
04	SM	035	INSTALL GABIONS AND PCC INVERT PAVING
04	SM	082	MODIFY EXISTING TRAFFIC SIGNAL
04	SM	084	STORM DAMAGE REPAIR & PLACE TECCO MESH AT VARIOUS LOCATIONS
04	SM	084	REPAIR SINKHOLE AND REPLACE FAILED CULVERT
04	SM	084	STORM DAMAGED REPAIR AND REPLACE DAMAGED PIPE
04	SM	084	STORM DAMAGE REPAIR / SLOPE STABILIZATION
04	SM	092	RECONSTRUCT SOUNDWALL AND UNDERPIN FOUNDATION
04	SM	092	SLOW VEHICLE LANE
04	SM	101	TWO YEAR PLANT ESTABLISHMENT LANDSCAPE PROJECT
04	SM	101	ADD AUX LANES
04	SM	101	INSTALL NEW RAMP METERING AND UP GRADE PARTIALLY INSTALLED RM
04	SM	101	REPLACE BRIDGE STRUCTURE AT SAN FRANCISQUITA CREEK
04	SM	101	RECONSTRUCT INTERCHANGE
04	SM	280	REPLACE 54" CMP CULVERT
04	SM	280	SAFETY ROADSIDE REST AREA (SRRA) REHABILITATION
04	SM	280	INSTALL TRAFFIC MANAGEMENT SYSTEM (TMS) ELEMENTS
04	SM	280	BRIDGE REPLACEMENT, SEISMIC RETROFIT
04	SM	280	REPLACEMENT HIGHWAY PLANTING
04	SM	280	ROADSIDE ENHANCEMENT (PROVIDE ADA UPGRADES TO VISTA POINTS)
04	SM	280	INSTALL RSP
04	SOL	012	WIDEN AND REHABILITATE ROADWAY
04	SOL	012	INSTALL LEFT TURN POCKETS, FROM AZAVEDO RD TO LIBERTY ISLAND RD
04	SOL	029	TREAT BRIDGE DECK WITH METHACRYLATE
04	SOL	037	HIGHWAY PLANTING AND LANDSCAPING
04	SOL	080	CONSTRUCT TRAFFIC MONITORING STATIONS, AND RAMP METERING IMPROVE
04	SOL	080	RESTORE ROADSIDE REST AREA
04	SOL	080	CRACK SEAL AND OVERLAY ON MAINLINE.
04	SOL	080	MITIGATION PROJECT
04	SOL	080	REPLACE ALL EXISTING TYPE K BARRIER WITH TYPE 60 CONCRETE BARRIERS
04	SOL	080	REPLACE WEIGH SCALES
04	SOL	080	HIGHWAY PLANTING
04	SOL	080	LENGTHENING ON-RAMP AND WIDEN BRIDGE.
04	SOL	084	REMOVE TOP OF LEVEE'S EMBANKMENT, REPLACE WITH GEOGRID-REINFORCED
04	SOL	680	REPLACE FAILED CULVERT, BACKFILL SINKHOLE AND PLACE ROCK SLOPE
04	SOL	780	PROVIDE SUFFICIENT VERTICAL CLEARANCE
04	SON	001	UPGRADE TRAFFIC BARRIER AND GUARDRAIL END TERMINALS
04	SON	001	REMOVE DEBRIS AND CONSTRUCT SOLDIER PILE WALL WITH TIEBACKS.
04	SON	001	SLIDE REPAIR AND CULVERT REPLACEMENT PROJECT
04	SON	001	REPLACE CULVERT
04	SON	001	REPLACE CULVERT AND RSP
04	SON	001	CONSTRUCT SOLDIER PILE WALL
04	SON	001	INSTALL TIE BACK WALL
04	SON	001	INSTALL ROCK SLOPE PROTECTION
04	SON	001	REMOVE DEBRIS, INSTALL SUB-DRAINAGE SYSTEM, RECONSTRUCT EMBANKMENT
04	SON	012	CONSTRUCT LEFT-TURN LANES AND REALIGN ROADWAY
04	SON	012	UPGRADE TRAFFIC BARRIER AND GUARDRAIL END TERMINALS
04	SON	012	REPLACE BRIDGE FOR SCOUR
04	SON	012	INST SIGNAL & RALIGN THE RTE 12 APPROACH AT THE JCT OF ST RTE 12 &
04	SON	012	INSTALL TRAFFIC SIGNALS AND WIDEN ROADWAY AT THE INTERSECTION
04	SON	101	WIDEN FREEWAY FROM FOUR TO SIX LANE FOR HOV
04	SON	101	WIDEN AND RECONSTRUCT INTERCHANGE
04	SON	101	WIDEN FREEWAY 4 TO 6 LANES (HOV), C CONSTRUCT AUXILIARY LANES & MODIFY
04	SON	101	REPLACE AND GRIND PCC PAVEMENT, DIG OUT, GRIND AND FOG SEAL
04	SON	101	UPGRADE TRAFFIC BARRIER AND GUARDRAIL END TERMINALS
04	SON	101	STREET IMPROVEMENTS AT COLLEGE AVENUE AND 6TH STREET
04	SON	101	FOLLOW UP LANDSCAPING

Caltrans District	County	Route	Project Description
04	SON	101	CONSTRUCT INTERCHANGE ON RTE 101 AT PETALUMA BLVD;INCLUDING FRONTAGE
04	SON	101	REMOVE GORE SIGN AND REPLACE WITH OVERHEAD SIGNS
04	SON	116	REALIGN VERTICAL AND HORIZONTAL CURVES
04	SON	116	MITIGATION - TREE PLANTING AND CREEK CHANNELIZATION
04	SON	116	INSTALL TRAFFIC SIGNALS, WIDEN SHOULDER AND EXTEND LEFT TURN
04	SON	116	
04	SON	116	CONSTRUCT SOLDIER PILE WALL
04	SON	121	REPLACE FAILED CULVERTS
04	SON	128	HIGHWAY PLANTING RESTORATION
04	SON	128	BRIDGE REPLACEMENT
04	SON	128	MITIGATION PROJECT
04	VAR	101	INSTALL WATERSHED AWARENESS SIGNS
05	MON	001	REALIGN LEFT TURN LANE
05	MON	001	GUARDRAIL & CRASH CUSHIONS
05	MON	001	CONSTRUCT RETAINING WALL
05	MON	001	BASIN COMPLEX FIRE REPAIR - ROCK FALL NETS, CULVET DEBRIS RACKS
05	MON	001	PAVING, DEBRIS REMOVAL, DEBRIS RACK CONST, ROCKFALL DRAPERY
05	MON	1	CONSTRUCT NEW INTERCHANGE
05	MON	001	CONSTRUCT NEW BRIDGE & ROCK SHED
05	MON	001	CONSTRUCT SOLAR-POWERED TRANSPORTATION MANAGEMENT SYSTEM
05	MON	001	REPAIR LANDSLIDES AT THREE LOCATIONS
05	MON	068	INSTALL CHANGEABLE MESSAGE SIGNS & CCTV CAMERAS
05	MON	068	BRIDGE WIDENING
05	MON	101	INSTALL METAL BEAM GUARD RAIL
05	MON	101	INSTALL METAL BEAM GUARD RAIL
05	MON	101	RUBBERIZED HOT MIX ASPHALT OVERLAY
05	MON	101	REPLACE TWO CULVERTS
05	MON	101	CONSTRUCT MEDIAN ACCELERATION & LEFT TURN CHANNELIZATION
05	MON	101	MITIGATION PLANTING PROJECT
05	MON	101	RECONSTRUCT INTERCHANGE
05	MON	101	CONSTRUCT INTERCHANGES AND OPERATIONAL IMPROVEMENTS
05	MON	101	CONSTRUCT NEW INTERCHANGE
05	MON	156	WIDEN TO 4-LN DIVIDED EXPRESSWAY AND BUILD INTERCHANGES
05	MON	198	REALIGN AND WIDEN ROADWAY
05	MON	198	VERTICAL CURVE CORRECTION
05	SB	001	CURB RAMPS
05	SB	001	CONSTRUCT MEDIAN BARRIER
05	SB	001	RECONSTRUCT SLOPE PROTECTION
05	SB	101	INSTALL VEHICLE DETECTION SYSTEMS
05	SB	101	CURB RAMPS
05	SB	101	INSTALL VEHICLE DETECTION SYSTEMS
05	SB	101	INSTALL METAL BEAM GUARD RAIL
05	SB	101	GUARDRAIL & CRASH CUSHIONS
05	SB	101	CONSTRUCT MEDIAN BARRIER
05	SB	101	CONSTRUCT MEDIAN BARRIER
05	SB	101	LANDSCAPE MITIGATION
05	SB	101	HIGHWAY PLANTING RESTORATION
05	SB	101	UPGRADE PUMP PLANT (BR #51-0210W)
05	SB	101	INSTALL TRAFFIC SURVEILLANCE STATIONS
05	SB	101	UPGRADE EXISTING DRAINAGE CULVERTS
05	SB	101	WIDENING TO SIX LANES
05	SB	101	CONSTRUCT INTERCHANGE
05	SB	135	CONSTRUCT MEDIAN BARRIER
05	SB	154	PHYSICAL BARRICADE BR #51-0037
05	SB	166	TRAFFIC SIGNALS AND MODIFY CURB RAMPS
05	SB	166	RELOCATE DRAINAGE DITCHES
05	SB	192	CONSTRUCT UNDERGROUND DRAINAGE
05	SB	192	REPAIR FIRE DAMAGE
05	SB	192	REPLACE BRIDGE (SCOUR)
05	SB	246	PASSING LANES AND OPERATIONAL IMPROVEMENTS
05	SBT	025	CURVE REALIGNMENT
05	SBT	101	PAINT BRIDGES
05	SBT	156	CONSTRUCT TRANSPORTATION MANAGEMENT SYSTEM (TMS)
05	SBT	156	WIDEN 2 TO 4 LANES
05	SCR	001	INSTALL VEHICLE DETECTION SYSTEMS
05	SCR	001	CONSTRUCT TRANSPORTATION MANAGEMENT SYSTEM (TMS)
05	SCR	001	GRIND AND REPLACE ASPHALT CONCRETE, REPAIR MBGR
05	SCR	001	HIGHWAY PLANTING
05	SCR	001	AUXILIARY LANES
05	SCR	1	REVISE INTERCHANGE
05	SCR	009	CONSTRUCT RETAINING WALL
05	SCR	009	CONSTRUCT RETAINING WALL
05	SCR	009	GUARDRAIL UPGRADE & SHOULDER WIDENING
05	SCR	009	STORM WATER MITIGATION
05	SCR	017	CONSTRUCT SOLDIER PILE WALL
05	SCR	017	GUARD RAIL & RETAINING WALL
05	SCR	017	UPGRADE GUARDRAIL, CRASH CUSHIONS AND END TREATMENTS
05	SCR	017	CONSTRUCT CONCRETE GUARDRAIL
05	SCR	129	TRAFFIC SIGNAL
05	SLO	001	ADA CURB RAMPS
05	SLO	001	REPAIR CULVERTS
05	SLO	001	CONSTRUCT DRAINAGE IMPROVEMENTS AND WIDEN SHOULDERS
05	SLO	001	TRANSPORTATION ENHANCEMENT COASTAL ACCESS AND PROTECTION
05	SLO	001	TRANSPORTATION ENHANCEMENT SCENIC CORRIDOR ENHANCEMENT
05	SLO	041	PAVING AND EARTHWORK
05	SLO	041	LANDSCAPE

Caltrans District	County	Route	Project Description
05	SLO	046	REHABILITATE ROADSIDE REST AREA FOR ADA COMPLIANCE
05	SLO	046	REPAIR FAILED DRAINAGE SYSTEM
05	SLO	046	LANDSCAPE MITIGATION
05	SLO	101	REHABILITATE ROADWAY
05	SLO	101	GUARDRAIL & CRASH CUSHIONS
05	SLO	101	INSTALL METAL BEAM GUARD RAIL
05	SLO	101	CONSTRUCT AUXILLARY LANES
05	SLO	101	CONSTRUCT MEDIAN BARRIER
05	SLO	101	WIDEN & REPLACE BRIDGES, CONSTRUCT AUX LANES & BICYCLE PATH
05	SLO	101	CONSTRUCT AUXILARY LANES
05	SLO	101	CONSTRUCT AUXILIARY LANES
06	FRE	005	SAFETY ROADSIDE REST AREA RESTORATION
06	FRE	033	SIESMIC RESTORATION
06	FRE	041	CORRIDOR ENHANCEMENT
06	FRE	041	WIDEN ON-RAMPS @ MCKINLEY & SHIELDS & INSTALL 3 RAMP METERING SYSTEMS
06	FRE	041	FREEWAY MAINTENANCE ACCESS
06	FRE	041	INSTALL RAMP METERS AT 4 LOCATIONS ALONG NB FRE 41
06	FRE	041	CONSTRUCT NB AUXILIARY LANE
06	FRE	041	UPGRADE METAL BEAM GUARD RAIL
06	FRE	041	2-LN EXPRWY TO 4-LN EXPRWY
06	FRE	043	OVERLAY (CAPM)
06	FRE	043	2C TO 4 LN DIVIDED HIGHWAY
06	FRE	099	REPLACEMENT PLANTING
06	FRE	099	CONSTRUCT ADA RAMPS
06	FRE	099	STORM WATER IMPROVEMENT
06	FRE	099	WIDEN 4-LANE FWY TO 6-LANE FWY
06	FRE	099	RECONSTRUCT INTERCHANGE
06	FRE	145	AC OVERLAY
06	FRE	168	MEDIAN BARRIER
06	FRE	168	REALIGN THE HORIZONTAL CURVE
06	FRE	180	INSTALL MEDIAN BARRIER
06	FRE	180	CONSTRUCT MEDIAN BARRIER
06	FRE	180	BRIDGE REPLACEMENT
06	FRE	180	BRIDGE REPLACEMENT
06	FRE	180	2C TO 4E ON EXISTING ALIGNMENT
06	FRE	180	2C TO 4E ON EXISTING ALIGNMENT
06	FRE	180	2C TO 4E ON NEW ALIGNMENT
06	KER	000	REPLACE EQUIPMENT SHOP AND OFFICE
06	KER	005	HOT MIX ASPHALT CONCRETE SURFACING
06	KER	005	SAFETY ROADSIDE REST AREA RESTORATION
06	KER	005	UPGRADE MEDIAN BARRIERS
06	KER	005	EXTEND INSPECTION FACILITY
06	KER	014	CONSTRUCT 4 LN EXPRESSWAY W/CONTROL ACCESS
06	KER	043	AC OVERLAY AND DIGOUTS CAPM
06	KER	046	WIDEN SHOULDERS
06	KER	046	2-LN CONVENTIONAL TO 4-LN EXPRESSWAY
06	KER	046	2-LN CONVENTIONAL TO 4-LN CONVENTIONAL - EXPRWY
06	KER	046	INSTALL SIGNALS
06	KER	46	WIDEN TO 4-LANE
06	KER	046	2-LN CONVENTIONAL TO 4-LN CONVENTIONAL - EXPRWY
06	KER	058	CONSTRUCT APPROACH SLABS
06	KER	058	CONSTRUCT ADA RAMPS
06	KER	058	OVERLAY (CAPM)
06	KER	058	BRIDGE SCOUR REMEDIATION
06	KER	058	REVEGETATION TO RESTORE ECOLOGICAL AREA
06	KER	058	REPLACE OC W/4-LANE OC & CONSTRUCT PARTIAL CLOVERLEAF INTERCHANGE
06	KER	065	CONSTRUCT PASSING LANES AND INTERSECTION IMPROVEMENT-CONDUCT ES
06	KER	099	HIGHWAY PLANTING AND IRRIGATION
06	KER	099	99 CORRIDOR-BRIDGE ENHANCEMENT
06	KER	119	WIDEN INTERSECTION
06	KER	119	WIDEN SHOULDERS
06	KER	119	WIDEN FROM 2-LANE CONV TO 4-LANE EXPRESSWAY
06	KER	166	ASPHALT CONCRETE OVERLAY
06	KER	178	INSTALL TRAFFIC SIGNALS
06	KER	178	INSTALL METAL BEAM GUARDRAILS
06	KER	184	CHANNELIZATION AND SIGNALIZATION
06	KER	184	INSTALL TRAFFIC SIGNALS
06	KER	204	BRIDGE REPLACEMENT NEW BRIDGE #50-0505
06	KER	395	CONVERT TO 4-LANE EXPRESSWAY
06	KIN	041	REHAB ROADWAY AND WIDEN SHOULDERS
06	KIN	41	AC OVERLAY AND WIDEN SHOULDER
06	KIN	198	2C TO 4E ON NORTH SIDE
06	KIN	198	MEDIAN BARRIER
06	KIN	198	RUBBERIZED AC OVERLAY
06	KIN	198	REHAB 3 BRIDGE DECKS
06	KIN	198	RECONSTRUCT INTERCHANGE
06	KIN	198	CONSTRUCT INTERCHANGE
06	MAD	041	WIDENING ROADWAY
06	MAD	041	INSTALL CENTERLINE RUMBLE STRIPS AND WIDEN SHOULDERS
06	MAD	099	PAVEMENT REHABILITATION
06	MAD	099	MODIFY INTERCHANGE
06	MAD	145	WIDEN BRIDGE
06	MAD	145	AC OVERLAY, WIDEN SHOULDERS, AND REPLACE BRIDGE (SCOUR)
06	TUL	000	CONSTRUCT ADA RAMPS
06	TUL	063	INSTALL SIGNALS
06	TUL	063	CONSTRUCT ADA RAMPS

Caltrans District	County	Route	Project Description
06	TUL	065	DOUBLE THRIE BEAM MEDIAN BARRIER
06	TUL	65	2C TO 4E
06	TUL	99	WIDEN 4-LANE FREEWAY TO 6-LANES
06	TUL	099	SAFETY ROADSIDE REST AREA RESTORATION
06	TUL	099	BRIDGE DECK REPLACEMENT
06	TUL	099	RECONSTRUCT INTERCHANGE
06	TUL	099	BRIDGE REHABILITATION
06	TUL	099	99 CORRIDOR-BRIDGE ENHANCEMENT
06	TUL	99	4F TO 6F
06	TUL	198	MEDIAN BARRIER
06	TUL	216	WIDEN AND REALIGNMENT OF HOUSTON AVENUE (SR 216)
07	LA	000	REHAB MATERIAL LAB BLDG
07	LA	000	SOIL STABILIZATION & REVEGETATION *201.335 FY 09/10
07	LA	000	SOIL STABILIZATION & REVEGETATION *201.335 FY 09/10
07	LA	001	INST VERT CLEARANCE & WARNING SIGNS *SEE 22650K FOR PSR
07	LA	001	INST VERT CLEARANCE & WARNING SIGNS *SEE 22650K FOR PSR
07	LA	001	PLACE RUBBERIZED ASPHALT CONCRETE
07	LA	001	INSTALL LEFT TURN PHASES & SIGNALS
07	LA	001	CONSTRUCT CURB RAMPS
07	LA	001	REPAIR DAMAGED CMP & EMBANKMENT *DIRECTOR'S ORDER
07	LA	001	SAND FILTERS & INFILTRATION DEVICES *PHASE 2 OF 10 *201.335 FY 09/1
07	LA	001	SEIMIC RETROFIT CONNECTOR
07	LA	002	REPLACE AND UPGRADE BRIDGE RAILING
07	LA	002	CCTV CAMERA CONTROL SYSTEM UPGRADE
07	LA	002	GORE AREA CLEAN-UP/UPGRADES (CURE)
07	LA	005	CONST HOV LANE *SPLIT FR 1218U1
07	LA	5	HOV LN *OE APPT.=9/30/03
07	LA	005	MODIFY IC/REALIGN RAMPS *BROKERED D-6*OE APT=01/07/03*COP
07	LA	005	SLAB REPLACEMENT *DO
07	LA	005	RESTORE ROADWAY ALIGNMENT *NOT PROGRAMMED
07	LA	005	INST VERT CLEARANCE & WARNING SIGNS *SEE 22650K FOR PSR
07	LA	005	SOIL STABILIZATION & REVEGETATION *201.335 FY 08/09
07	LA	005	SAND FILTERS & INFILTRATION DEVICES *PHASE 1 OF 10 *201.335 FY 08/0
07	LA	005	REPAIR FIRE DAMMAGE,REPAIR DRAINAGE *DIR
07	LA	005	CONST HOV LANE *SPLIT FR 1218U1
07	LA	005	CONST HOV LANE *SPLIT FR 1218U1
07	LA	005	UPGRADE MTL BM BAR/CONCRETE BARRIER *INACTIVE
07	LA	005	GRAFFITI CONTROL MEASURES
07	LA	005	RETROFIT CONNECTOR
07	LA	005	WIDENING AND MODIFY INTERCHANGE *POR/=21590K*TCRP APP'D 7/6/01
07	LA	005	UPGRADE MEDIAN BARRIER
07	LA	005	UPGRADE MEDIAN BARRIERS
07	LA	005	SLAB RPL & GRIND,COLD PLANE OVERLAY
07	LA	005	ROADWAY REHABILITATION
07	LA	005	STORM WATER SOURCE CONTROL
07	LA	005	WIDEN FREEWAY AND STRUCTURES
07	LA	010	GORE & SLOPE PAVING AND NATIVE TREE
07	LA	010	REPAIR STORM DAMAGE TO ROADWAY
07	LA	010	REPLACE JOINT SEALS.
07	LA	010	SAND FILTERS & INFILTRATION DEVICES *PHASE 2 OF 10 *201.335 FY 09/1
07	LA	010	INSTALL NEW MBGR/CONCRETE RAILING
07	LA	014	SAFETY IMPROVEMENT
07	LA	039	REBUILD WASHOUT ROADWAY POR=1X3201,*DIR
07	LA	039	REBUILD WASHOUT ROADWAY *POR=1X3201,DIR
07	LA	039	BRIDGE SCOUR MITIGATION
07	LA	060	SAND FILTERS & INFILTRATION DEVICES *PHASE 1 OF 10 *201.335 FY 08/0
07	LA	060	COLD PLANE & RAC OVERLAY *NO WORKPLAN!
07	LA	060	WINDEN OFF-RAMP
07	LA	071	REPAIR EARTHQUAKE DAMAGE *DIR
07	LA	071	RECONSTRUCTION-ADD LANES *NO FUNDS *INCL 210611 & 210621
07	LA	090	SAND FILTERS & INFILTRATION DEVICES *PHASE 1 OF 10 *201.335 FY 09/1
07	LA	091	ROADWAY REHABILITATION
07	LA	091	REPLACE BRIDGE RAIL
07	LA	091	STRUCTURE REHABILITATION
07	LA	101	SAND FILTERS & INFILTRATION DEVICES *PHASE 1 OF 10 *201.335 FY 10/1
07	LA	101	UPGRADE BRIDGE RAILS
07	LA	101	WIDENING OF 2 US-101 OFF-RAMPS
07	LA	105	JOINT SEAL REPLACEMENT
07	LA	110	CONSTR AUXILIARY LN; MODIFY RAMPS INCLUDED 241101 & 241201
07	LA	110	REPL FAILED CULVERT,BACKFILL *DIR
07	LA	110	UPGRADE END TREATMENT & CRASH CUSHN
07	LA	138	WIDEN CONVENTIONAL HIGHWAY (SEG 5) *SPLIT=1272U1
07	LA	138	WIDEN CONVENTIONAL HIGHWAY (SEG 12) *SPLIT=1272U1
07	LA	187	MEDIAN ISLAND & CURB RAMP IMPROVMNT
07	LA	210	SOIL STABILIZATION & REVEGETATION *201.335 FY 08/09
07	LA	210	BRIDGE PRESERVATION
07	LA	210	FREEWAY MAINTENANCE ACCESS
07	LA	213	INSTALL TRAFFIC SIGNAL AND LIGHTING
07	LA	405	WIDEN FOR HOV LANE *TCRP ; ADV=08/08
07	LA	405	ADD AUX LANE
07	LA	405	BRIDGE DECK REHABILITATION
07	LA	405	BRIDGE PRESERVATION
07	LA	405	CONSTRUCT SOUTH HALF INTERCHANGE *WORK STARTED 08/01/96
07	LA	405	WIDEN EXISTING FREEWAY
07	LA	405	REALIGN AND WIDEN EXISTING HIGHWAY
07	LA	605	REPAIR JOINT SEAL

Caltrans District	County	Route	Project Description
07	LA	605	INST MET BEAM GUARDRAIL @ VAR LOC *NOT PROGRAMMED
07	LA	710	ROADSIDE RESTORATION
07	LA	710	LONG LIFE PAVEMENT REHABILITATION
07	LA	710	UPGRADE MEDIAN BARRIER
07	LA	710	LANDSCAPE *POR OF 18310
07	VEN	001	INST VERT CLEARANCE & WARNING SIGNS *SEE 22650K FOR PSR
07	VEN	001	STRUCTURE (SEAWALL) RESTORATION
07	VEN	101	REPLACE DRAINAGE CULVERTS *NOT PROGRAMMED
07	VEN	101	HOV LANES *COMBINED/196401
07	VEN	101	PAVEMENT REHABILITATION *NOT PROGRAM
07	VEN	101	INTERCHANGE IMPROVEMENT COMB=195211/195221
07	VEN	118	REPAIR CULVERT *DIR
07	VEN	118	FREEWAY WIDENING
07	VEN	118	REBUILD COLLAPSING SECTION 2-LN HWY *DIR
07	VEN	150	STORM DAMAGE REPAIR *DIR
08	RIV	010	INSTALL STANDBY GENERATOR, 2000 GAL LPG TANK AND UPGRADE CONDUITS
08	RIV	010	INSTALL MEDIAN BARRIER
08	RIV	010	REMOVE AC OVERLAY, SAND BLAST, REPAIR/REPLACE JOINT SEAL, SEAL
08	RIV	010	CONST BOB HOPE DR EXT W/NEW DIAMOD IC
08	RIV	010	MODIFY IC
08	RIV	010	PAVEMENT REHAB
08	RIV	010	METHACRYLATE & POLYESTER CONCRETE OVERLAY
08	RIV	010	UPGRADE GUARDRAIL END TREATMENTS
08	RIV	010	PCC GRINDING AND SLABS REPLACEMENT
08	RIV	010	REMODEL ADMINISTRATION OFFICE WEIGH STATION AND WEIGH IN MOTION
08	RIV	010	UPGRADE END GUARDRAIL TREATMENTS
08	RIV	015	IC & RAMP RECONFIGURATION
08	RIV	015	CONSTRUCT NEW IC
08	RIV	015	
08	RIV	015	PAVEMENT REHAB & WIDEN MEDIAN SHOULDER & BRIDGE
08	RIV	060	STRIPING AND PAVEMENT MARKERS
08	RIV	074	INSTALL CENTERLINE RUMBLE STRIP
08	RIV	74	REPLACE BRIDGE
08	RIV	078	REPLACE BRIDGE (BR#56-0830)
08	RIV	079	INSTALL TRAFFIC SIGNAL AND RESTRIPE INTERSECTION
08	RIV	079	RESTRIPE EXISTING CENTERLINE AND ADD GROUND IN RUMBLE STRIPES IN THE
08	RIV	086	CONSTRUCT NEW INTERCHANGE
08	RIV	091	REHABILITATE PAVEMENT (CAP-M)
08	RIV	091	LANDSCAPE ENHANCEMENT AT GREEN RIVER OC
08	RIV	091	WIDEN BRIDGES
08	RIV	95	UPGRADE DRAINAGE FACILITIES
08	RIV	111	REGRADE BRIDGE DECK AND REPAIR SPALLS/CRACKS
08	RIV	111	REPLACE BRIDGE
08	RIV	215	MODIFY/RETROFIT SPRUCE MATERIAL LABORATORY
08	RIV	215	GRIND 45, OVERLAY 60 MM RUBBERIZED AC
08	RIV	215	WIDEN EXISTING FREEWAY
08	RIV	371	
08	SBD	002	WIDEN HIGHWAY FOR CONTINUOUS TWLTL AND UPGRADE SHOULDERS
08	SBD	010	CONSTRUCT CURB RAMPS
08	SBD	010	CONSTRUCT 1 W/B MIXED-FLOW LANE ADDITION
08	SBD	010	INSTALL RMS & VDS & WIDEN ON-RAMPS
08	SBD	010	WIDEN EXIT RAMPS AND CONSTRUCT AUXILIARY LANES
08	SBD	010	CORRIDOR VISUAL MASTER PLAN
08	SBD	010	RECONST IC & MAINLINE REALIGNMENT, TEA 21 DEMO PROJECT
08	SBD	015	CONSTRUCT INTERCHANGE
08	SBD	015	UPGRADE AND PAVE MEDIAN BARRIER.
08	SBD	015	PLACE RUBBERIZED HOT MIX ASPHALT
08	SBD	015	REPAIR ELECTRICAL SYSTEMS
08	SBD	015	COLD PLANE AND OVERLAY AC. INSTALL MBGR AND END TREATMENT. REMOVE
08	SBD	015	REHABILITATE PAVEMENT
08	SBD	015	CONSTRUCT WELCOME CENTER
08	SBD	015	CONST COMM VEH ENFORCEMENT FACILITY (CVEF)& AGRIC INSPEC FACILITY (AIF)
08	SBD	015	SEISMIC RETROFIT BRIDGES
08	SBD	015	UPGRADE SRRA
08	SBD	015	SEISMIC RETROFIT
08	SBD	015	GRIND 45 MM, OVERLAY 60 MM DGAC (TYPE A)
08	SBD	015	ADD N/B MIXED FLOW LANE W/AUX LANE. RECON "D" & "E" ST ICS & STODDARD
08	SBD	015	BEAUTIFICATION LAND MODERNIZATION
08	SBD	15	CONSTRUCT INTERCHANGE
08	SBD	018	TRANSPORTATION ENHANCEMENT
08	SBD	018	INSTALL TRAFFIC SIGNALS
08	SBD	018	INSTALL TRAFFIC SIGNALS
08	SBD	18	REPLACE BRIDGE (SCOUR)
08	SBD	018	UPGRADE WHEEL CHAIR CURB RAMPS AND MODIFY TRAFFIC SIGNAL AND
08	SBD	018	UPGRADE GUARDRAIL END TREATMENTS
08	SBD	38	REPLACE BRIDGE DECK, UPGRADE BRIDGE RAIL, APPROACH GUARD RAIL AND
08	SBD	040	COMMERCIAL VEHICLE ENFORCEMENT FACILITY
08	SBD	040	PAVEMENT REHAB
08	SBD	040	GRIND 45 MM AND OVERLAY 60 MM AC
08	SBD	058	WIDEN AND PROVIDE 1.5 M MEDIAN AND STANDARD SHOULDERS AND INSTALL
08	SBD	58	CONSTRUCT 4-LANE EXPWY ON NEW ALIGN
08	SBD	58	REALIGN & WIDEN 2 TO 4 LANE EXPWY
08	SBD	062	RESTORE ROAD BED
08	SBD	62	REPLACE BRIDGE (SCOUR)
08	SBD	062	RURAL ROADSIDE ARCHEOLOGICAL INVENTORY
08	SBD	071	BEAUTIFICATION LAND MODERNIZATION

Caltrans District	County	Route	Project Description
08	SBD	095	INSTALL MEDIAN RUMBLE STRIPS AND WIDEN SHOULDERS
08	SBD	138	REALIGN VERTICAL CURVES
08	SBD	138	REHABILITATE BRIDGE
08	SBD	138	WIDEN TO 4 LNS FR BEEKLEY RD TO JCT 15, ADD 1 LN EB FR PHELAN RD TO
08	SBD	178	DRAINAGE IMPROVEMENTS
08	SBD	215	ASPHALT CONCRETE OVERLAY
08	SBD	215	RESTORE GUARDRAIL, SIGNS, LANDSCAPING & IRRIGATION SYSTEM
08	SBD	247	CONSTRUCT SHOULDERS @ VARIOUS LOC
08	SBD	395	WIDEN MEDIAN & SHOULDER, INSTALL MEDIAN & SHOULDER RUMBLE STRIPS &
08	SBD	395	INSTALL "NO PASSING" STRIPING AND RUMBLE STRIPS ON CENTERLINE
09	INY	000	REMODEL SHOP FACILITIES
09	INY	190	CONSTRUCT SCENIC OVERLOOK
09	INY	190	ROCKFALL MITIGATION
09	INY	190	CONSTRUCT PULL-OUT
09	INY	395	ROADWAY REHABILITATION
09	INY	395	DRAINAGE SYSTEM RESTORATION
09	INY	395	UPGRADE FOR ADA COMPLIANCE
09	INY	395	HISTORIC ALIGNMENT PULLOUTS
09	INY	395	PAVEMENT REHABILITATION
09	INY	395	CONSTRUCT 4 LANE EXPRESSWAY
09	MNO	108	PAVEMENT REHABILITATION COLD IN- PLACE RECYCLE
09	MNO	395	WIDEN SHOULDERS
09	MNO	395	REHABILITATE FOR ADA COMPLIANCE
09	MNO	395	WILDLIFE UNDERCROSSING FOR DEER AND OTHER LARGE ANIMALS
09	MNO	395	BRIDGE DECK REHABILITATION AND RAIL UPGRADE
09	MNO	395	REALIGN & CURVE CORRECTION
10	ALP	088	REMOVE UNSTABLE ROCKS, FLATTEN EXISTING SLOPE AND PROVIDE
10	AMA	088	ROADWAY REHABILITATION.
10	CAL	4	CURVE CORRECTION
10	CAL	12	STRUCTURAL SECTION REPAIR
10	CAL	026	PAVEMENT REHABILITATION
10	MER	005	INSTALL TRAFFIC MONITORING STATIONS (TMS) AT VARIOUS LOCATIONS
10	MER	005	WEIGH STATION IMPROVEMENTS
10	MER	059	INSTALL NEW SIGNALS
10	MER	059	WIDEN TO 4 LANES.
10	MER	099	REPLACE BRIDGES
10	MER	099	INSTALL ABOUT 220 TREES AND 800 GROUNDCOVER SHRUBS AND IRRIGATION
10	MER	99	4E TO 6F ON 8F R/W ALIGNMENT
10	MER	099	HIGHWAY PLANTING & IRRIGATION
10	MER	099	HIGHWAY PLANTING & IRRIGATION
10	MER	099	CLOSED CIRCUIT TV CAMERAS & CMS'
10	MER	099	HIGHWAY PLANTING AND IRRIGATION
10	MER	099	WIDEN FROM FOUR LANES TO SIX LANES
10	MER	140	BRIDGE REPLACEMENT AND WIDENING
10	MER	152	INSTALL SIGNALS.
10	MER	165	AC OVERLAY & WIDEN/REPLACE STR.
10	MER	165	AC OVERLAY, DIGOUTS, INTERSECTION IMPROVEMENTS & SHOULDER WIDENING
10	SJ	005	REPAIR CULVERT
10	SJ	005	INSTALL TRAFFIC MONITORING STATIONS (TMS) AT VARIOUS LOCATIONS
10	SJ	005	MODIFY/RECONSTRUCT
10	SJ	012	INSTALL TRAFFIC SIGNAL AND INTERSECTION LIGHTING
10	SJ	012	OPERATIONAL IMPROVEMENTS AT GLASSCOCK ROAD AND SMART CORRIDOR
10	SJ	012	REPLACE BEARING PADS, JOINT SEALS
10	SJ	012	REPLACE DAMAGED BEAM AND CONTROL HOUSE
10	SJ	026	INSTALL CONTINUOUS TWO-WAY LEFT TURN LANE.
10	SJ	026	CONSTRUCT A CONTINUOUS TWO-WAY LEFT TURN LANE, AND 2.4 METER SHOULDERS
10	SJ	088	RUBBERIZED HOT MIX ASPHALT OVERLAY
10	SJ	099	REPAIR GIRDER
10	SJ	099	REPLACE HIGHWAY PLANTING
10	SJ	099	INSTALL TRAFFIC MONITORING STATIONS (TMS) AT VARIOUS LOCATIONS
10	SJ	099	UPGRADE MEDIAN BARRIER
10	SJ	099	WIDEN TO 6 LANES
10	SJ	099	WIDEN TO 6 LANES
10	SJ	205	REPAIR GIRDER
10	SJ	205	CONSTRUCT WESTBOUND TRUCK BYPASS ROUTE.
10	SJ	205	HIGHWAY PLANTING
10	SJ	205	CONSTRUCT AUXILIARY LANES
10	STA	033	REHABILITATE ROADWAY(CAPM)
10	STA	033	BRIDGE SCOUR MITIGATION BR #38-0018
10	STA	099	RECONSTRUCT NB/SB OFF-RAMPS, RELOCATE MAINT VEHICLE PULLOUT/
10	STA	099	CONSTRUCT CONCRETE MEDIAN BARRIER
10	STA	099	PLACE RUMBLE STRIPS
10	STA	099	REPAIR SLIPOUT
10	STA	099	HIGHWAY PLANTING
10	STA	099	REHABILITATE 5 RAMPS
10	STA	099	BRIDGE ENHANCEMENT, 16 STRUCTURES
10	STA	108	HOT MIX ASPHALT RESURFACING
10	STA	108	LEFT TURN CHANNELIZATION WITH NEW SIGNALS
10	STA	219	WIDEN TO 4 LANES AND INTERSECTION IMPROVEMENTS
10	TUO	049	CURVE IMPROVEMENT.
10	TUO	049	INSTALL TRAFFIC SIGNALS
10	TUO	108	LEFT TURN CHANNELIZATION
10	TUO	108	CONSTRUCT STAGE 2 OF SONORA BYPASS
10	TUO	120	RUBBERIZED HOT MIX ASPHALT OVERLAY
11	IMP	000	CONSTRUCT MAINTENANCE STATION
11	IMP	008	ROADSIDE REST AREA RESTORATION/ADA COMPLIANCE

Caltrans District	County	Route	Project Description
11	IMP	008	BRIDGE REHAB WITH SEISMIC RETROFIT
11	IMP	008	REST AREA RESTORATION
11	IMP	008	REVISED INTERCHANGE
11	IMP	008	RECONSTRUCT INTERCHANGE
11	IMP	086	INSTALL NEW TRAFFIC SIGNALS
11	IMP	086	SCOUR MITIGATION
11	IMP	098	WIDEN HIGHWAY
11	IMP	98	WIDEN TO 4-LANE CONVENTIONAL HWY
11	IMP	186	PEDESTRIAN/TRANSIT FACILITIES -(TE)
11	SD	000	REMEDIATION OF HYDROCARBON CONTAMINATION @ MAINT. BLDG
11	SD	000	REMEDIATION OF HYDROCARBON CONTAMINATION
11	SD	000	UPGRADE MATERIALS LAB FACILITY
11	SD	005	INSTALL NEW SIGNAL
11	SD	005	INSTALL RAMP METERS & HOV LANES
11	SD	005	CLEAN AND TREAT BRIDGE DECK WITH METHACRYLATE
11	SD	005	ROADSIDE REST AREA RESTORATION/ ADA COMPLIANCE
11	SD	005	CONSTRUCT CURB RAMPS
11	SD	005	STORM WATER MITIGATION SLOPE EROSION REPAIR
11	SD	5	CONST AUXILIARY LANE S/B (PSR)
11	SD	005	CULVERT REHABILITATION
11	SD	005	STORM WATER SLOPE STABILIZATION
11	SD	005	UPGRADE MEDIAN GUARDRAIL TO CONCRETE BARRIER
11	SD	005	REPLACE OVERHEAD AND ROADSIDE SIGNS ON FORMER RTES SR-209 & SR-274
11	SD	005	STORM WATER DETENTION BASINS RETROFIT
11	SD	005	STORM WATER MITIGATION - PLACEMENT OF STRUCTURAL BEST MANAGEMENT
11	SD	005	REMOVE EXISTING MBGR AND REPLACE WITH CONCRETE BARRIER AND UPGRADE
11	SD	005	SEISMIC RETROFIT AND STRUCTURE REHABILITATION
11	SD	5	CONST HOV/GENERAL PURPOSE/AUX LANES
11	SD	008	ROADSIDE REST AREA RESTORATION/ADA COMPLIANCE
11	SD	008	MODIFY INTERSECTION
11	SD	008	CONST AUXILIARY LANE-E/B & REMOVE PED OC BRIDGE (GRAPE ST)
11	SD	008	DRAINAGE IMPROVEMENTS
11	SD	008	FREEWAY MAINTENANCE ACCESS - VARIOUS LOCATIONS
11	SD	015	CLEAN AND TREAT BRIDGE DECK WITH METHACRYLATE AND REPLACE JOINTS
11	SD	015	STORM WATER MITIGATION SLOPE EROSION REPAIR
11	SD	015	STORM WATER MITIGATION-PLACEMENT OF STRUCTURAL BEST MANAGEMENT
11	SD	015	STORM WATER MITIGATION - PLACEMENT OF STRUCTURAL BEST MANAGEMENT
11	SD	015	MANAGED LANES - SOUTH SEGMENT
11	SD	015	MANAGED LANES - SOUTH SEGMENT
11	SD	015	MANAGED LANES - SOUTH SEGMENT
11	SD	015	MANAGED LANES - SOUTH SEGMENT
11	SD	015	CONSTRUCT MANAGED LANES MIDDLE UNIT 1
11	SD	015	CONSTRUCT MANAGED LANES MIDDLE UNIT 3
11	SD	015	CONSTRUCT MANAGED LANES UNIT 4
11	SD	015	CONSTRUCT MANAGED LANES MIDDLE UNIT 5
11	SD	052	PAVEMENT REHABILITATION
11	SD	067	PAVEMENT REHABILITATION OF MAINLINE SHOULDERS, AND RAMPS.
11	SD	075	REPAIR/UPGRADE CURB RAMPS TO CURRENT ADA STANDARDS
11	SD	076	INSTALL CONCRETE MEDIAN BARRIER
11	SD	076	BRIDGE REPLACEMENT (SCOUR)
11	SD	076	INSTALL RUMBLE STRIP, REPLACE MBGR AND UPGRADE END TREATMENTS
11	SD	078	INSTALL CENTERLINE RUMBLE STRIPS AND RECONSTRUCT MBGR/UPGRADE END
11	SD	079	HOT MIX ASPHALT OVERLAY GRADED OVERLAY
11	SD	094	FREEWAY MAINTENANCE ACCESS GORE PAVING & LANDSCAPE WORK
11	SD	094	INSTALL TRAFFIC SIGNAL AND WIDEN RAMP
11	SD	094	RECONSTRUCT METAL BEAM GUARD RAIL AND END TREATMENT
11	SD	094	PAVEMENT REHABILITATION
11	SD	094	CONSTRUCT HOV/GENERAL PURPOSE/AUX LANES
11	SD	163	HISTORIC TRANSPORTATION REHABILITATION-TRANSPORTATION ENHANCEMENT
11	SD	188	PEDESTRIAN/TRANSIT FACILITIES -(TE)
11	SD	805	CONSTRUCT TWO SOUTHBOUND AUX LANES
11	SD	805	CONSTRUCT HOV AND DAR
11	SD	805	STORM WATER MITIGATION SLOPE EROSION REPAIR
11	SD	905	BICYCLE/PEDESTRIAN FACILITIES TRANSPORTATION ENHANCEMENT (TE)
12	ORA	001	DRAINAGE WORK AND PLANTING
12	ORA	001	ADJUST TRAFFIC CONTROL DEVICES
12	ORA	005	WIDEN FREEWAY AND OVERHEAD
12	ORA	005	PROVIDE ENHANCED GORE PAVING, ROCK BLANKET AND ACCENT PLANTING
12	ORA	005	CONSTRUCT TWO SOUNDWALLS (1,805 LF)
12	ORA	005	CONSTRUCT TWO SOUNDWALLS (660 LF)
12	ORA	005	UPGRADE TMC BUILDING EMERGENCY SYSTEMS
12	ORA	005	GROOVE EXISTING LANES OF PAVEMENT FR. POSTMILE 9.4 TO 13.2, REPLACE
12	ORA	005	HOT MIX ASPHALT OVERLAY
12	ORA	005	RESURFACE THE RAMP WITH OPEN GRADED ASPHALT CONCRETE (OGAC)
12	ORA	005	REMOVE AND REPLACE DAMAGED & FAILED EXPANSION JOINT ASSEMBLY UNIT
12	ORA	005	CONSTRUCT AUX LANE & WIDEN SB OFF- RAMP, RAMP INTERSECTION & CAMINO
12	ORA	005	HIGHWAY PLANTING REHABILITATION, REMOVE & REPLACE DEAD OR ILL
12	ORA	005	INSTALL FLASHING BEACONS AND ADJUST TRAFFIC CONTROL DEVICE
12	ORA	005	ADD AUXILIARY LANE ON I-5 SB FROM TUSTIN RANCH RD TO JAMBOREE RD AND
12	ORA	005	INSTALL CMS AT VARIOUS FREEWAY INTERCHANGE
12	ORA	005	NB/SB DOWEL BAR RETROFIT, SLAB REPLACEMENT AND GRINDING
12	ORA	005	WIDEN S/B OFF-RAMP AND BRIDGE OC @ CAMINO DE ESTRELLA
12	ORA	005	REVEGETATION OF EXPOSED SLOPES FOR NPDES CONCERNS AND SOURCE CONTROL
12	ORA	005	REVEGETATION OF EXPOSED SLOPES FOR NPDES CONCERNS AND SOURCE CONTROL
12	ORA	005	REVEGETATION OF EXPOSED SLOPES FOR SOURCE CONTROL
12	ORA	022	SR-22/I-405/I-605 HOV CONNECTORS

Caltrans District	County	Route	Project Description
12	ORA	039	INSTALL SAFETY LIGHTING
12	ORA	039	PAVEMENT REHABILITATION
12	ORA	055	RUBBERIZED ASPHALT CONCRETE OVERLAY
12	ORA	055	CONSTRUCT SIDEWALK
12	ORA	055	CONSTRUCT SB AUXILIARY LANE BETWEEN DYER ROAD AND MAC ARTHUR BLVD
12	ORA	055	METHACRYLATE SEAL DECK TREATMENT, JOINT SEALS
12	ORA	055	DRAINAGE IMPROVEMENT
12	ORA	055	CONSTRUCT AUXILIARY LANE
12	ORA	055	REMOVE DISEASED EUCALYPTUS TREES
12	ORA	057	SR-57 NORTHBOUND WIDENING
12	ORA	057	SR-57 NORTHBOUND WIDENING
12	ORA	057	HIGHWAY PLANTING RESTORATION
12	ORA	057	ADD NORTHBOUND LANE
12	ORA	057	UPGRADE METAL BEAM GUARD RAIL (MBGR) TO CONCRETE BARRIER, AND
12	ORA	073	OGAC OVERLAY AND GROOVE RAMP
12	ORA	073	STORM WATER MITIGATION & SLOPE STABILITY
12	ORA	073	HIGHWAY PLANTING RESTORATION
12	ORA	074	PLANT ESTABLISHMENT/ENVIRONMENTAL MITIGATION
12	ORA	074	WIDEN FROM 2 LANES TO 4 LANES
12	ORA	074	RECONSTRUCT IC AT SR-74
12	ORA	090	CONSTRUCT GRADE SEPARATION
12	ORA	091	PROVIDE ONE EB LANE
12	ORA	091	WIDEN RAMP
12	ORA	091	REMOVE METAL GURAD BEAM RAIL
12	ORA	091	REMOVE & REPLACE DAMAGED MBGR, SIGN POSTS, SIGNS AND FENCING.
12	ORA	091	INSTALL FIBER ROLLS. PROVIDE HYDRO- MULCH TO STABILIZE SLOPES. REPLAC
12	ORA	091	REPAIR BRIDGE WINGWALL & RETAINING WALL DUE TO SETTLEMENT & ROTATION
12	ORA	091	ADD A FIFTH LANE IN EACH DIRECTION EXTEND THE 6TH LANE FR LAKEVIEW
12	ORA	091	PROVIDE AN AUXILIARY LANE FROM NB SR-55 TO TUSTIN AVE OFF-RAMP
12	ORA	091	WILDLIFE CORRIDOR CONNECTIVITY ENHANCEMENT (INSTALL VEGETATION)
12	ORA	142	INSTALL ROCK SLOPE DRAPERY
12	ORA	241	REVEGETATION OF EXPOSED SLOPES FOR NPDES CONCERNS AND SOURCE CONTROL
12	ORA	241	REPLACE MBGR'S STEEL BLOCKS WITH WOOD, UPGRADE TREATMENTS & BARRIER
12	ORA	261	RUBBERIZED ASPHALT CONCRETE OVERLAY
12	ORA	261	SELENIUM TREATMENT FACILITY
12	ORA	405	HIGHWAY PLANTING RESTORATION
12	ORA	405	MODIFY STRIPING
12	ORA	405	HOT MIX ASPHALT OVERLAY
12	ORA	405	HOT MIX ASPHALT OVERLAY
12	ORA	405	REMOVE RAISED CURB ISLANDS & MBGRS, GRADE, PAVE, INSTALL CONCRETE
12	ORA	605	REPLACE PAVEMENT AND TREAT DECKS
12	ORA	605	ADA IMPROVEMENT