

DEPARTMENT OF TRANSPORTATION

DES-OE MS #43
1727 30TH Street, 2ND Floor
Sacramento, CA 95816



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December 19, 2002

04-Nap-121-R8.0/R9.2
04-253804
ACSTP-ACBRSTP-P121(020)E

Addendum No. 1

Dear Contractor:

This addendum is being issued to the contract for construction on State highway in NAPA COUNTY IN NAPA FROM 0.9 KM EAST OF IMOLA AVENUE SEPARATION TO 0.4 KM WEST OF STATE ROUTE 221.

Submit bids for this work with the understanding and full consideration of this addendum. The revisions declared in this addendum are an essential part of the contract.

Bids for this work will be opened on January 14, 2003 instead of the original date of January 7, 2003.

This addendum is being issued to change the bid opening date as shown herein and revise the Project Plans, the Notice to Contractors and Special Provisions, the Proposal and Contract, and the Federal Minimum Wages with Modification Number 22 dated 12-13-02. A copy of the modified wage rates are available for the contractor's use on the Internet Site:

http://www.dot.ca.gov/hq/esc/oe/weekly_ads/addendum_page.html

Project Plan Sheets 6, 38, 39, 53, 55, 87, 88, 89, 91, 147, 158, 159, 160, 185, and 195 are revised. Half-sized copies of the revised sheets are attached for substitution for the like-numbered sheets.

Project Plan Sheet 134A is added. Half-sized copy of the added sheet is attached for addition to the project plans.

In the Special Provisions, Page vii, "STANDARDS PLAN LIST," RSP T2, "TEMPORARY CRASH CUSHION, SAND FILLED (SHOULDER INSTALLATIONS)," is added to the list.

In the Special Provisions, Section 4, "BEGINNING OF WORK, TIME OF COMPLETION AND LIQUIDATED DAMAGES," the first paragraph is revised as follows:

"Attention is directed to the provisions in Sections 8-1.03, "Beginning of Work", 8-1.06, "Time of Completion", 8-1.07, "Liquidated Damages", 10-1.01, "Order of Work", and 20-4.08, "Plant Establishment Work", of the Standard Specifications and these Special Provisions."

In the Special Provisions, Section 4, "BEGINNING OF WORK, TIME OF COMPLETION AND LIQUIDATED DAMAGES," the following paragraph is added after the fifth paragraph:

"The left turn from westbound Imola to southbound Cabot Way is shown on the plans to be closed during Stage 2. This turning movement provides important access to local businesses and the contractor shall diligently prosecute the work required to restore this turning movement. Attention is directed to Section 4. "Beginning of Work, Time of Completion and Liquidated Damages"."

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In the Special Provisions, Section 4, "BEGINNING OF WORK, TIME OF COMPLETION AND LIQUIDATED DAMAGES," the following paragraph is added at the end of the Section:

"The work subsequent to the elimination of the left turn to Cabot Way, as shown on the plans as Stage 2, shall be diligently prosecuted such that this left turn is fully restored before the expiration of 25 working days. The contractor shall pay to the State of California the sum of \$1,000 per day, for each and every calendar day's delay in completing this work in excess of the number of working days prescribed above."

In the Special Provisions, Section 5-1.065, "HAZARDOUS AND RESTRICTED MATERIAL, GENERAL," is added as attached.

In the Special Provisions, Section 5-1.22, "RELATIONS WITH U.S. ARMY CORPS OF ENGINEERS," the following is added at the end of the second paragraph:

"The contractors' attention is directed to the following conditions which are among those outlined in the permit or the referenced documents from USFWS and NMFS.

1. The following Term and Condition implements Reasonable and Prudent Measure No. 1 of NMFS Supplemental Biological Opinion:

Construction activities below Mean Higher High Water (MHHW) will be limited to a seasonal work window of June 1 through October 15. The contractor will notify NMFS if work is to continue between October 15 and October 31. After October 15, the contractor shall be prepared to "winterize" the site within 48 hours notice, and shall monitor the California Department of Water Resources gauges for the Napa River basin on a daily basis. If the cumulative rainfall after October 15 reaches or exceeds 2 inches, all work below MHW shall cease for the winter within 48 hours and no later than October 31.

2. Litter and construction debris shall be removed from below Mean Higher High Water (MHHW) line daily and disposed of at an appropriate site."

In the Special Provisions, Section 5-1.22, "RELATIONS WITH U.S. ARMY CORPS OF ENGINEERS," the third paragraph is revised as follows:

"Attention is directed to Section 7-1.11, "Preservation of Property," and Section 7-1.12, "Indemnification and Insurance," of the Standard Specifications, and Section 10-1.01, "Order of Work", of these special provisions."

In the Special Provisions, Section 5-1.22, "RELATIONS WITH U.S. ARMY CORPS OF ENGINEERS," the second sentence of the fifth paragraph is revised as follows:

"The Contractor shall prepare and submit to the engineer an evacuation plan for removing all equipment and materials within 3 meters above Mean Higher High Water (MHHW)."

In the Special Provisions, Section 5-1.23, " RELATIONS WITH U.S. COAST GUARD," is replaced as attached.

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In the Special Provisions, Section 5-1.27, "ENVIRONMENTALLY SENSITIVE AREA," the following sentence is added after the first sentence of the second paragraph:

"The area outlined for Temporary Fence (Type ESA) on the east bank of the river is intended to protect the Delta Tule Pea plants that have been identified in the general vicinity outlined. The State of California will gather seeds from the plants in the late summer months of 2003 after which time this area will cease to be environmentally sensitive and the fencing shall be removed by the contractor."

In the Special Provisions, Section 10-1.01, "ORDER OF WORK," the second paragraph is replaced with the following paragraph:

"Work within the waterway and below mean higher high water (MHHW) shall not be performed between October 15th and June 1st of any year except as permitted by the regulatory agencies. Mean Higher High Water (MHHW) is defined as elevation 1.798. The contractor shall remove cofferdams in the waterway prior to October 15th of any year unless any one of the following conditions are met:

- 1) Removal of cofferdams or other in-river blockage below MHHW can be delayed until October 31st provided that the cumulative rainfall in the Napa River Basin does not exceed 2" as determined by monitoring of the California Department of Water Resources gauges for the Napa River;
- 2) The Army Corps of Engineers has completed their downstream terracing Contract 1.B, or
- 3) It can be shown to the satisfaction of the Engineer by hydraulic calculations prepared and stamped by a Civil engineer licensed in the State of California, that the blockage left within the floodway will not increase the water surface elevations above the FEMA Base Flood Elevation shown in the Flood Insurance Study for the City of Napa. If the cumulative rainfall after October 15 reaches or exceeds two inches, all work below the MHHW shall cease, and the cofferdams shall be removed for the winter within 48 hours."

In the Special Provisions, Section 10-1.01, "ORDER OF WORK," the following paragraph is added after the third paragraph:

"Attention is directed to "COOPERATION" of these special provisions regarding the sanitary sewer force main to be constructed by others. The existing 600 mm sewer force main is anticipated to be abandoned in place in May of 2003 and is in direct conflict with foundation work for several bents. The contractor is to assume this force main will be in service and is not to be disturbed until June 1, 2003."

In the Special Provisions, Section 10-1.01, "ORDER OF WORK," the following paragraph is added after the fifth paragraph:

"The left turn from westbound Imola to southbound Cabot Way is shown on the plans to be closed during Stage 2. This turning movement provides important access to local businesses and the contractor shall diligently prosecute the work required to restore this turning movement. Attention is directed to Section 4. "Beginning of Work, Time of Completion and Liquidated Damages"."

In the Special Provisions, Section 10-1.035, "SITE HEALTH AND SAFETY PLAN," is added as attached.

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In the Special Provisions, Section 10-1.14, "COOPERATION," the following paragraph is added at the end of the section:

"Pacific Gas and Electric – Constructing temporary power poles north of the project and providing temporary underground power for the existing bridge. Coordinate the installation of 12kV lines into empty ducts in joint trench."

In the Special Provisions, Section 10-1.375, "HAZARDOUS AND RESTRICTED MATERIAL EXCAVATION," is added as attached.

In the Special Provisions, Section 10-1.39, "LIGHTWEIGHT FILL (EXPANDED POLYSTYRENE BLOCK)," the following sentence is added after the second sentence of the seventh paragraph:

"Temporary shoring shall be utilized as necessary during staged construction of the lightweight fill to insure a stable fill or to secure in place the geomembrane covering of any exposed vertical surfaces. Any shoring placed shall be removed to the extent that all new EPS blocks can be placed snugly against existing block."

In the Special Provisions, Section 10-1.39, "LIGHTWEIGHT FILL (EXPANDED POLYSTYRENE BLOCK)," the following sentence is added at the end of the last paragraph:

"The distribution slab closure pour shall be placed no sooner than five days after the roadway structural section is placed."

In the Special Provisions, Section 10-3.10, "STATE-FURNISHED CONTROLLER ASSEMBLIES," in the first paragraph the words "a battery backup system," are deleted.

In the Special Provisions, Section 10-3.10, "STATE-FURNISHED CONTROLLER ASSEMBLIES," the following paragraph is added after the second paragraph:

"The existing battery backup system in the controller cabinet at the intersection of South Coombs Street shall be functionally tested by the Contractor before removal from the existing cabinet and again after reinstalling in the new cabinet. These tests will be performed in the presence of the Engineer."

In the Special Provisions, Section 10-3.18, "PAYMENT," the following paragraph is added after the second paragraph:

"Full compensation for testing of battery backup system shall be considered as included in the contract lump sum price paid for Signal and lighting (Location 1) and no additional compensation will be allowed therefor."

In the Special Provisions, Section 10-1.56, "JOINT SEAL ASSEMBLIES (MOVEMENT RATING EXCEEDING 100 mm)," the twenty-first paragraph is revised as follows:

"The maximum depth and width of the recess shall be such that the primary reinforcement to provide the necessary strength of the structural members is outside the recess. The maximum depth of the recess at abutments shall be 250 mm, and at hinges shall be 300 mm. The maximum width of recess on each side of the expansion joint shall be 450 mm."

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In the Proposal and Contract, the Engineer's Estimate Items 4 and 51 are revised as attached.

To Proposal and Contract book holders:

Replace pages 3 and 5 of the Engineer's Estimate in the Proposal with the attached revised pages 3 and 5 of the Engineer's Estimate. The revised Engineer's Estimate is to be used in the bid.

Indicate receipt of this addendum by filling in the number of this addendum in the space provided on the signature page of the proposal.

Submit bids in the Proposal and Contract book you now possess. Holders who have already mailed their book will be contacted to arrange for the return of their book.

Inform subcontractors and suppliers as necessary.

This office is sending this addendum by UPS overnight mail to Proposal and Contract book holders to ensure that each receives it.

If you are not a Proposal and Contract book holder, but request a book to bid on this project, you must comply with the requirements of this letter before submitting your bid.

Sincerely,

ORIGINAL SIGNED BY

REBECCA D. HARNAGEL, Chief
Office of Plans, Specifications & Estimates
Office Engineer

Attachments

5-1.065 HAZARDOUS AND RESTRICTED MATERIAL, GENERAL

Attention is directed to "Earthwork" of these special provisions regarding the removal and disposal of hazardous and restricted material.

Attention is directed to Aerially Deposited Lead elsewhere in these special provisions.

Hazardous and Restricted material have been discovered through testing within the project limits. Testing consisted of collecting and analyzing in-situ samples from within the limits of excavation shown on the plans. The site investigation report entitled "Draft Phase III Investigation Marsh and Floodplain Soils and Force Main Alignment Soils, dated November 2002" is available for inspection at the Department of Transportation, Duty Senior's Desk, 111 Grand Avenue, Oakland, CA. Requests to review the reports must be made with the Duty Senior at least 24 hours in advance. These test results have been used for disposal characterization of material within the project limits and shall not be construed as identifying all locations within the project limits that contain contaminants.

Within the context of this contract, the designation "hazardous" shall apply to material with contaminant levels that meet or exceed the contaminant levels specified in the California Code of Regulations (CCR) Title 22. The designation "restricted" shall apply to material with either contaminant levels below the levels specified in the California Code of Regulations CCR Title 22 but with detectable contaminant levels that meet or exceed the contaminant levels specified in United States Environmental Protection Agency, Region 9, 2000 Preliminary Remediation Goals or California Environmental Protection Agency's Preliminary Remediation Goals and/or the San Francisco Bay Region Water Quality Control Board's (RWQCB) Risk Based Screening Levels (RBSLs). The levels of material designated as hazardous are not regulated under the Resource Conservation and Recovery Act (RCRA). The levels of hydrocarbon contamination in the material will restrict disposal and shall be considered to be designated waste as defined by Chapter 15, Title 23 of the State of California Code of Regulations.

The site contaminant found to be present on the site is chromium III. Levels of chromium found within the project limits range from less than 11 to 15,000 mg/kg chromium III with a 90 percent upper confidence limit of the arithmetic mean of 492 mg/kg chromium III, after removal of the hotspot area, as analyzed by EPA Test Method 6010.

Other locations have material designated as "unsuitable". This designation shall apply to material with contaminant concentrations below hazardous and restricted material criteria but above the criteria cited in the draft agreement between the Napa County Flood Control and Water Conservation District and the RWQCB. According to this draft agreement the maximum concentration of chromium that can remain in the upper one-meter soils within the marsh and floodplain is 370 mg/kg. Locations with chromium concentrations above 370 mg/kg but with concentrations that do not exceed hazardous and restricted material criteria have been identified and shown on the plans as being unsuitable material requiring excavation and replacement with suitable material to the final terrace grade.

All hazardous and restricted materials on exteriors of transport vehicles shall be removed and placed either into the current transport vehicle or the excavation prior to the vehicle leaving the exclusion zone. No hazardous material shall be deposited on public roads. The Contractor shall indemnify the State from any costs due to spillage during the transport of the hazardous material to the disposal facility.

The Contractor shall monitor the air quality continuously during excavation operations at all locations containing hazardous material.

Characterization and disposal of additional material resulting from excavations performed outside of the pay limits shown on the plans, specified in the Standard Specifications, or specified or directed by the Engineer, for the Contractor's convenience, shall be at the Contractor's expense. This resultant material shall be presumed to be either restricted material or hazardous material if the test results for the location indicate that the material being excavated is restricted material or hazardous material. The Contractor shall dispose of the resultant material in conformance with the provisions in "Earthwork" of these special provisions. When the material must be removed from highway right of way, the Contractor shall furnish replacement material suitable for the purpose intended in conformance with the provisions in Section 19, "Earthwork", of the Standard Specifications.

APPLICABLE RULES AND REGULATIONS

Excavation, transport and disposal of hazardous and restricted material shall be in accordance with the rules and regulations of the following agencies:

United States Department of Transportation (USDOT)
United States Environmental Protection Agency (USEPA)
California Environmental Protection Agency (CAL-EPA)

1. Department of Toxic Substance Control (DTSC) – North Region
2. Integrated Waste Management Board

3. Regional Water Quality Control Board, Region – 2, San Francisco Bay (RWQCB)
4. State Air Resources Board

Bay Area Air Quality Management District (BAAQMD)
California Division of Occupational Safety and Health Administration (CAL-OSHA)

PERMITS AND LICENSES

The Contractor shall procure all permits and licenses, pay all charges and fees, and give all notices necessary and incident to the due and lawful prosecution of the work, including registration for transporting vehicles carrying the hazardous material and the restricted material, in conformance with the provisions in Section 7-1.04, "Permits and Licenses," of the Standard Specifications.

The Engineer will obtain the Environmental Protection Agency Generator Identification Number as the State is the Generator.

SAMPLING AND ANALYSIS

The Contractor shall test the material to be excavated at his own expense for any additional acceptance requirements put forth by the disposal facility. Sampling and analysis shall be performed using the sampling and analysis procedure required by the disposal facility.

The Contractor may perform additional tests on the material to be excavated at his option and expense for confirmation of the material classification as hazardous or restricted or unsuitable within the limits of excavation shown on the plans. Sampling and analysis shall be done per EPA Method 6010B for chromium. the same or equivalent tests specified in the Materials Information Handout. The Contractor shall submit for approval by the Engineer, his sampling and analysis procedure and the name and address of the laboratory to be used fifteen (15) working days prior to beginning any sampling or analysis. The laboratory used shall be certified under the Environmental Laboratory Program (ELAP) by the California Department of Health Services. Analytical results shall be sent by facsimile or hand delivered to the Engineer as soon as they are available. A summary report of sampling protocols, chain of custody, analysis and laboratory data sheets shall be supplied to the Engineer within 30 days of completion of sampling.

Sampling and analysis shall be based on guidelines in USEPA, SW 846, "Test Methods for Evaluating Solid Waste, Volume II: Field Manual Physical/Chemical Methods".

Contractor shall perform confirmation sampling and testing after excavating the hotspot at FP-21 to demonstrate satisfactory removal of contamination as described in this section. Sampling and analysis shall be done per EPA Method 6010B for chromium. Confirmation tests shall consist of one four-point composite sample per each 15 meters of excavation sidewall length at each excavation site. One four-point composite sample shall be taken at the excavation bottom per every 40 square meters of area at the FP-21 excavation site. The confirmation clean-up level for chromium at hotspot FP-21 is 750 mg/kg based on the RBSL for chromium III for residential/industrial use. If the results of one or more of these samples exceed 750 mg/kg, additional excavation of the contaminated soil shall be conducted as directed by the engineer, followed by additional confirmation testing as described above until the excavation of the hotspot is considered clean.

For excavated soil on-site or off-site use/disposal purposes, the chromium 90% and 95% UCLMs for this project are 491 mg/kg and 537 mg/kg respectively for all soils after removal and separate off-site disposal of hotspot FP-21.

The Contractor shall submit, for approval by the Engineer, a Sampling and Analysis Plan that describes the scope of the investigation along with the name, address, and ELAP certification number of the testing laboratory, 15 working days prior to beginning any sampling or analysis for additional disposal facility requirements, reclassification of material, characterization of material outside of the excavation pay limits, or post excavation confirmation testing. The Sampling and Analysis Plan shall be prepared under the guidance of a registered professional experienced in site characterization. The Engineer will make the final decision on reclassification or characterization of material after review of the test data. Five working days shall be allowed for review of test data. In the event the Engineer fails to complete the review within the time allowed, and if, in the opinion of the Engineer, completion of the work is delayed or interfered with by reason of the Engineer's delay in completing the review, the Contractor will be compensated for any resulting loss, and an extension of time will be granted, in the same manner as provided for in Section 8-1.09, "Right of Way Delays", of the Standard Specifications.

Operations shall be conducted in a manner that prevents increases in the quantities of hazardous material resulting from mixing with material containing lower contaminant concentrations. No additional compensation will be made for material requiring reclassification due to failure to segregate the material after excavation.

MEASUREMENT AND PAYMENT

Full compensation for conforming to the requirements of this section shall be considered as included in the prices paid for the various contract items of work affected by this section and no additional compensation will be allowed therefor.

5-1.23 RELATIONS WITH U.S. COAST GUARD

The location of the bridge work is adjacent to and across a navigable river which is under the jurisdiction of the U.S. Coast Guard, Eleventh Coast Guard District, Building 50-6, Coast Guard Island, Alameda, CA 94501-5100, Telephone (510) 437-3514. The U.S Coast Guard has issued Bridge Permit 1-02-11. Copies of the permit may be obtained at the Department of Transportation, Plans and Bid Documents Section, MS 26, 1120 N Street, Room 200, Sacramento, CA 95814, Telephone 916-654-4490, and are available for inspection at the office of the District Director of Transportation at 111 Grand Avenue, Oakland, CA 94623.

Attention is directed to Sections 7-1.01, "Laws To Be Observed", and 7-1.11, "Preservation of Property", of the Standard Specifications. Attention is directed to "Bridge Removal" of these special provisions.

The Contractor shall comply with all requirements of the U.S. Coast Guard contained within CFR Title 33 with regard to the manner in which he conducts his operations and disposes of material. Any restriction of the channel and all navigation and warning lights shall be in accordance with regulations and subject to the approval of the U.S. Coast Guard.

The contractor shall submit to the Engineer a plan for the Coast Guard's review and approval 30 days in advance of any operations within the navigational channel or with impacts to navigation including falsework, trestle and cofferdam plans. The plans shall state and graphically represent on 8-1/2" x 11" paper the nature, position, timing and duration of the equipment and operations affecting navigation. The time frame required for response shall be requested in the plan submitted and will be considered by the Coast Guard based on the priority of the proposed action.

Should the Contractor during the progress of the work sink, lose, or throw overboard any material, plant or machinery, which may be dangerous to or which will obstruct navigation, he shall forthwith recover or remove such obstruction. The Contractor shall give immediate notice to the proper authorities and if required shall mark or buoy such obstructions until they are removed. Material from the work shall not be disposed of in the channel.

The Contractor shall keep proper warning lights each night between the hours of sunset and sunrise upon all floating equipment connected with the work and upon all buoys which are of a size and in such location as to endanger or obstruct navigation.

The Contractor shall keep proper warning lights each night between the hours of sunset and sunrise and at other times when visibility is less than one mile; they shall be of sufficient candle power to be visible against background lighting at a distance of at least 300 meters. Attention is directed to "Navigational Lighting System" elsewhere in these Special Provisions.

All work shall be so conducted so that the free navigation of the waterway shall not be unduly interfered with. An opening 20 meters wide centered in the federal channel shall remain clear of obstructions. During bridge construction and/or removal operations the river channel may be closed for up to 72 hours at a time as directed by the Engineer and approved by the U.S. Coast Guard. More than one 72 hour closure will be permitted provided reasonable durations of time occur between closures as proposed in the plan submitted for review and approval by the Coast Guard. The minimum vertical opening for falsework or temporary trestle over the federal channel shall be 15 meters above Mean High Water elevation (1.798m). Obstructions placed in the river for construction purposes, such as falsework, temporary trestle or other devices, shall not occlude more than 20 percent of the total river channel capacity. The Contractor shall provide for the protection of construction equipment and materials including cofferdams and falsework or temporary trestles. This means of protection shall be outlined in the plans submitted for approval.

The Contractor shall remove accumulated floating debris as needed or as directed by the Engineer in order to maintain the required minimum channel flow area.

The Contractor shall post advance notice of the closure to the public a minimum of 10 days prior to the closure, as directed by the Engineer. The term "closed" as used herein applies either to the bridge lift span being inoperable and unable to open and allow taller vessels to pass, or to any significant impairment of the temporary navigation openings as shown on the plans and defined in these special provisions.

The Contractor shall confer with the Coast Guard Group North Coast Region, telephone (415) 904-5260, to confirm whether or not anchor lines would be acceptable in the channel due to existing navigation. If so, the Contractor should arrange to slack the lines, when not needed to move marine construction equipment, or when other vessels are passing by the work area. If anchor lines are not acceptable due to the presence of other navigation, spuds are recommended. The Contractor shall not tie off of existing fenders without approval of the Engineer.

Full compensation for conforming with the requirements of this section shall be considered as included in the contract prices paid for the various items of work involved and no additional compensation will be allowed therefore.

10-1.035 SITE HEALTH AND SAFETY PLAN

The Contractor shall prepare a detailed Site Health and Safety Plan for all site personnel, that identifies potential health and safety hazards associated with each operation and specifies work practices that will be used to protect workers from those hazards in conformance with the DTSC and CAL-OSHA regulations. At a minimum, the Site Health and Safety Plan shall identify key site safety personnel, describe risks associated with the work, describe training requirements, describe appropriate personal protective equipment, describe any site-specific medical surveillance requirements, describe any periodic air monitoring requirements, define appropriate site work zones, and describe any decontamination requirements. The Health and Safety Plan shall be submitted at least 15 working days prior to beginning work for review and acceptance by the Engineer. Prior to submittal, the Contractor shall have the Site Health and Safety Plan approved by an Industrial Hygienist certified in comprehensive practice by the American Board of Industrial Hygiene. Subcontractors shall use the Site Health and Safety Plan prepared by the Contractor or prepare and submit a separate Site Health and Safety Plan in conformance with these special provisions.

SAFETY

Prior to performing work at the locations containing material classified as hazardous, all personnel, including State Personnel, shall complete a safety training program that communicates the potential health and safety hazards associated with work on the site and instructs the personnel in procedures for doing the work safely. The level of training provided shall be consistent with the person's job function and conforms to OSHA and CAL-OSHA regulations. The training, including subsequent training required until the completion of the work, shall be provided by the Contractor. The Contractor shall provide a certification of completion of the Safety Training Program to all personnel. Any personal protective equipment required by the Contractor's Health & Safety Plan for personnel working within the exclusion zone will be supplied to State personnel by the Contractor. The number of State personnel requiring the above mentioned safety training program and personal protective equipment will be 3.

The decontamination area shall be located outside of the exclusion zone. Water from decontamination procedures shall be collected and disposed of at an appropriate disposal site by the Contractor. Non-reusable protective equipment, once used by any personnel, including State personnel, shall be collected and disposed of at an appropriate disposal site by the Contractor. The Contractor shall implement a plan to prevent exposure of personnel working in hazardous material excavations. The contract lump sum price paid for Site Health and Safety Plan shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all work involved in preparing and implementing the Site Health and Safety Plan including paying the Certified Industrial Hygienist and for providing personal protective equipment, training and medical surveillance as specified in these special provisions and as directed by the Engineer.

10-1.375 HAZARDOUS AND RESTRICTED MATERIAL EXCAVATION

All hazardous and restricted material to be excavated as shown on the table below or on the plans shall be transported to a disposal facility permitted to accept such material.

Attention is directed to "Hazardous and Restricted Material, General" of these special provisions.

Attention is directed to the plans that summarizes the degree and type of chromium contamination in the areas to be excavated. One location with a high concentration of chromium (referred to as FP-21) was discovered near the footing excavation for Bent #13R. The contractor is to excavate the soil at this location to the depth and limits identified on the plans and dispose of the material as a California hazardous waste at a Class I disposal facility.

Location of unsuitable material with chromium III levels below hazardous and restricted material criteria were discovered in the upper one-meter of soil to remain on-site within the limits of Marsh and Floodplain. These unsuitable materials containing chromium III are to be excavated to the limits and depths shown on the plans and backfilled with suitable material. The unsuitable material with chromium III shall be stockpiled and disposed of at a Class II or III disposal facility.

Hazardous materials shall be transferred directly from the excavation to a registered transport vehicle, a storage container approved for transport of hazardous waste by the United States Department of Transportation, or a stockpile location approved by the Engineer. Stockpile locations shall be maintained in accordance with the following requirements:

The material shall not contain free liquids that separate readily from the material. The presence or absence of free liquids shall be demonstrated by USEPA Method 9095 as modified by Section 66264.314 of Title 22 of the California Code of Regulations.

The material shall be stored on undamaged 60-mil high density polyethylene or an equivalent impermeable barrier unless the stockpiling location is on a paved surface. If the location is on a paved surface the thickness of the barrier can be reduced to 20-mil high density polyethylene or its equivalent. The dimensions of the barrier shall exceed the dimensions of the stockpile at all times. Any seams in the barrier shall be sealed to prevent leakage.

At the end of each day the material shall be covered with undamaged 12-mil polyethylene or an equivalent impermeable barrier to prevent windblown dispersion and precipitation run-off and run-on. When more than one sheet is required to cover the material, the sheets shall be overlapped a minimum of 450 mm in a manner that prevents water from flowing onto the material. The cover shall be secured in a manner that keeps it in place at all times. Driven anchors shall not be used except at the perimeter of the stockpile. The cover shall be inspected and maintained in accordance with the requirements of "Water Pollution Control" of these special provisions.

These stockpiling requirements apply to all temporary storage of hazardous or restricted material outside of an excavation or a transport container including, but not limited to, staging of excavated material next to the excavation prior to pick up by loading equipment, accumulating material for full transport loads, and awaiting test results required by a disposal facility. The removal of stockpiles shall begin within 30 days of accumulating 100 kg of hazardous material. After final removal has occurred the Contractor shall be responsible for any cleanup deemed necessary by the Engineer.

MEASUREMENT AND PAYMENT

Full compensation for excavating, confirmation testing, loading, transporting, and disposing of hazardous and restricted material, furnishing, installing and removing physical barriers, shall be considered as included in the contract price paid per cubic meter for Roadway Excavation (chromium) and no additional compensation will be allowed therefore.

Excavating and disposing of unsuitable material will be measured and paid for as Roadway Excavation and no additional compensation will be allowed therefore.

ENGINEER'S ESTIMATE

04-253804

Item	Item Code	Item	Unit of Measure	Estimated Quantity	Unit Price	Item Total
1	070012	PROGRESS SCHEDULE (CRITICAL PATH METHOD)	LS	LUMP SUM	LUMP SUM	
2	070018	TIME-RELATED OVERHEAD	WDAY	675		
3 (S)	071322	TEMPORARY FENCE (TYPE CL-1.8)	M	1500		
4	071325	TEMPORARY FENCE (TYPE ESA)	M	440		
5	030137	ASBESTOS HEALTH AND SAFETY PLAN	LS	LUMP SUM	LUMP SUM	
6	074019	PREPARE STORM WATER POLLUTION PREVENTION PLAN	LS	LUMP SUM	LUMP SUM	
7	074020	WATER POLLUTION CONTROL	LS	LUMP SUM	LUMP SUM	
8	030138	TEMPORARY DRAINAGE INLET PROTECTION	EA	12		
9	074023	TEMPORARY EROSION CONTROL	M2	9200		
10	074029	TEMPORARY SILT FENCE	M	1500		
11	074032	TEMPORARY CONCRETE WASHOUT FACILITY	EA	2		
12	074033	TEMPORARY CONSTRUCTION ENTRANCE	EA	6		
13	074034	TEMPORARY COVER	M2	400		
14 (S)	120090	CONSTRUCTION AREA SIGNS	LS	LUMP SUM	LUMP SUM	
15 (S)	120100	TRAFFIC CONTROL SYSTEM	LS	LUMP SUM	LUMP SUM	
16 (S)	120120	TYPE III BARRICADE	EA	74		
17 (S)	120149	TEMPORARY PAVEMENT MARKING (PAINT)	M2	230		
18	120151	TEMPORARY TRAFFIC STRIPE (TAPE)	M	400		
19 (S)	120159	TEMPORARY TRAFFIC STRIPE (PAINT)	M	7910		
20	120165	CHANNELIZER (SURFACE MOUNTED)	EA	55		

ENGINEER'S ESTIMATE

04-253804

Item	Item Code	Item	Unit of Measure	Estimated Quantity	Unit Price	Item Total
41	152430	ADJUST INLET	EA	1		
42	152440	ADJUST MANHOLE TO GRADE	EA	1		
43	152469	ADJUST UTILITY COVER TO GRADE	EA	6		
44	152475	ADJUST SEWER MANHOLE	EA	3		
45 (S)	153153	COLD PLANE ASPHALT CONCRETE PAVEMENT (45 MM MAXIMUM)	M2	1380		
46	155003	CAP INLET	EA	3		
47	157550	BRIDGE REMOVAL	LS	LUMP SUM	LUMP SUM	
48	160101	CLEARING AND GRUBBING	LS	LUMP SUM	LUMP SUM	
49	170101	DEVELOP WATER SUPPLY	LS	LUMP SUM	LUMP SUM	
50	190101	ROADWAY EXCAVATION	M3	60 000		
51	030141	ROADWAY EXCAVATION (CHROMIUM)	M3	560		
52	190103	ROADWAY EXCAVATION (TYPE Y) (AERIALY DEPOSITED LEAD)	M3	1100		
53	190110	LEAD COMPLIANCE PLAN	LS	LUMP SUM	LUMP SUM	
54 (F)	192003	STRUCTURE EXCAVATION (BRIDGE)	M3	1585		
55 (F)	192008	STRUCTURE EXCAVATION (TYPE A)	M3	5575		
56 (F)	192020	STRUCTURE EXCAVATION (TYPE D)	M3	5835		
57 (F)	192037	STRUCTURE EXCAVATION (RETAINING WALL)	M3	545		
58 (F)	193003	STRUCTURE BACKFILL (BRIDGE)	M3	4215		
59 (F)	193013	STRUCTURE BACKFILL (RETAINING WALL)	M3	415		
60	194001	DITCH EXCAVATION	M3	920		