

SPECIAL PROVISIONS

1000 GENERAL REQUIREMENTS

1000-1 DESCRIPTION OF WORK

Work under this contract consists of roadway reconstruction including Public Access and Notice, Mobilization, Traffic Control and Construction Signing, Water Pollution Control, Existing Utility & Roadway Facilities; Diversion, Control and Removal of Water; Demolition and Export, Temporary Shoring and Excavation Safety, Excavation and Backfill, Crushed Miscellaneous Base, Hot Mix Asphalt, Filter Material Placement, Rock Slope Protection, Reinforced Concrete Pipe Culvert Extension, Concrete Collar, Concrete Straight Headwall, Hydroseeding, Rolled Erosion Control Netting, Pavement Delineation and Striping, and appurtenant work.

All work shall be performed in accordance with the Plans, the Standard Specifications and these Special Provisions. During the duration of this contract, pavement resurfacing limits may be revised in accordance with 2-7 of the Standard Specifications.

1000-2 REFERENCE SPECIFICATIONS & STANDARD PLANS

1000-2.1 SPECIFICATIONS

The Standard Specifications for this project are the Ventura County Standard Specifications (106 pages with VCSS typed at the bottom) supplemented by the Standard Specifications for Public Works Construction, 2024 Edition (SSPWC, commonly known as the Greenbook), published by BNI Publications, Inc.

Where used herein, SSS shall mean the State Standard Specifications, being the State of California, Department of Transportation Standard Specifications. Where required by the Special Provisions, work shall conform to the requirements of said SSS except that where reference is made in the SSS to other sections thereof which are not specifically referred to in these Special Provisions, such reference shall be deemed to be reference to the applicable sections of the VCSS (herein referred to as Standard Specifications) or the applicable sections of the Standard Specifications for Public Works Construction 2024 Edition, herein referred to as SSPWC, and all references to "State" shall mean County of Ventura.

1000-2.2 STANDARD PLANS

The contract drawings utilize and make reference to the State Standard Plans (SSP), which is that document published by the State of California, Department of Transportation, and the Standard Plans for Public Works Construction (SPPWC) published by BNI Publications Inc.

1000-2.3 MODIFICATIONS TO STANDARD SPECIFICATIONS

Section 6-1.2.2 of the Standard Specifications is hereby amended to include the following:

A Preconstruction Meeting will be scheduled by the Agency prior to the beginning of contract time. The meeting will be held at the Administration Building of the County of Ventura Government Center on a date and time established by the Engineer. Attendance at the Pre-construction Meeting by the Contractor's Representative as described in 3-6 of the Standard Specifications is mandatory prior to starting work. Subcontractors' representatives as required by the Engineer shall also attend the Pre-construction Meeting.

Section 3-10.1 of the Standard Specifications shall only apply to Ventura County Standard Monuments (centerline well monuments). All other survey monuments, including nails, iron pipes, and any other objects in the public right-of-way referenced on recorded maps and Ventura County Field Notes will be replaced or reestablished by the Agency following construction.

1000-3 GENERAL GUARANTEE

Section 3-14.2 of the Standard Specifications is hereby deleted, and the following is substituted:

The Contractor shall obtain and assign to the Agency, such warranties or guarantees given as customary trade practice for any material or product purchased for use in the project constructed under this contract.

The last sentence of the third paragraph of 1-7.2, of the Standard Specifications is hereby deleted and the following is substituted:

The material and labor bond must remain in effect until the expiration of six months after the period in which verified claims may be filed as provided in the Civil Code.

1000-4 PROMPT PAYMENT TO SUBCONTRACTORS

A prime contractor or subcontractor shall pay any subcontractor no later than 7 days of receipt of each payment. Any contractor who violates prompt payment shall pay a penalty of 2% of the amount due per month for every month that payment is not made.

Prompt payment verification shall be submitted to the Agency on the 15th of each month.

The contractor shall notify the Agency in writing in the event that for some

reason timely payment is not made to a subcontractor. Disputes shall be resolved in accordance with the contract and state law.

1000-5 LABOR COMPLIANCE SOFTWARE

The County of Ventura has implemented, and maintains, a labor compliance software service program called "LCP Tracker".

Contractors and subcontractors shall keep accurate payroll records in accordance with Labor Code Section 1776 and shall furnish weekly certified payrolls for their workers and shall input their certified payroll records electronically using LCP Tracker within 7 days following the end of the preceding week.

NOTE: This requirement is in addition to the State of California requirement to upload payrolls into the State DIR electronic system. However, LCP Tracker has the functionality to upload the submitted payrolls directly to the State DIR electronic system.

In bidding on the project, it shall be bidder's responsibility to evaluate the cost of complying with the above-referenced LCP Tracker requirements.

Agency will provide materials and information to assist the Contractor with using LCP Tracker.

1000-6 PERMITS

In accordance with Section 2-2 of the Standard Specifications, the Contractor shall obtain and keep in force during the term of this contract all necessary permits required by the County of Ventura or any other permits necessary to perform the work.

The Contractor shall comply with all provisions of the permits including State Water Quality Control Board Certification (No. 35625WQ01) and Order (No. 2003-0017-DWQ); and California Department of Fish and Wildlife (CDFW) Operation of Law Notification (No. EPIMS-VEN-61161-R5); and Nationwide Permit 14, obtained from the United States Army Corps of Engineers.

The permits are attached to these specifications as Appendix H.

1000-7 WORK AREA

The Contractor shall confine its operations within the right-of-way and temporary easements shown on the Plans or shall make its own separate arrangements with owners of any additional property needed for this project. Prior to entering upon any such additional property, the Contractor shall submit

to the Engineer proof of written permission from the appropriate property owner(s).

1000-8 REQUIRED DOCUMENTS FOR WORK AREAS

The Contractor shall submit to the Engineer, for review and approval, the following documents at least three working days prior to beginning work in any specified area indicated on the vicinity maps shown on the Plans.

- A. Order of Work and Traffic Control Plan, including map(s) and descriptions indicating the locations of work areas, construction signing, text used for changeable message signs and timing of advance notice. Traffic Control Plan shall be updated and re-submitted for approval as necessary to accurately reflect the Contractor's planned operations.
- B. As-Built Plan of existing striping and marking. The plan shall be prepared by the Contractor.
- C. Plans documenting ties to the existing location of any facility planned for relocation, adjustment, or replacement including, but not limited to, survey monuments, manholes, valves, clean-outs, signs, roadside markers, and guardrails.
- D. Staging Area Plan which shall include details of construction materials and equipment that will be stored on-site and for all phases of the project per the VCSS 3-12 and these special provisions (1000-10).
- E. A map or written description of material haul routes.
- F. A copy of the Notice to Resident/Business/Institution.
- G. Copies of any required encroachment permits.
- H. Underground Service Alert confirmation number.
- I. Name and phone number of person(s) responsible for 24-hour maintenance of construction signing and traffic control.

1000-9 SURVEYING

The Contractor shall provide its own survey control for the project and shall bear all responsibility for the correctness of the work in accordance with 3-10 of the Standard Specifications. The Engineer will set only basic control bench marks for elevation and a minimum of two alignment control monuments as shown on the Plans.

1000-10 STORAGE OF CONSTRUCTION MATERIAL

The Contractor may store construction equipment and material outside the roadway and inside the Right-of-Way for the safety and security of all material and equipment. Storage of equipment or material is NOT permitted within the roadway pavement area.

Materials, which are to be disposed of, shall not be stored at the site but shall be removed immediately. No overnight storage of materials or debris will be allowed in the street.

1000-11 ORDER OF WORK

In accordance with Section 6-1.2.3 of the Standard Specifications, the Contractor shall start construction operations on that part of the work designated by the Engineer. If required by the Engineer, the Contractor shall submit a work plan for review and approval detailing the sequence of work.

1000-12 STORMWATER TRAINING CERTIFICATION

Ventura County Public Works Agency requires that all Public Works Contractors self-certify that they have received all applicable training in stormwater pollution prevention and best management practices to ensure proper installation and maintenance of BMP's during construction. This certification will be required to be submitted before a Notice to Proceed can be issued.

For the Contractor's convenience, the Agency has developed a series of ten (10) training videos averaging between 15 to 20 minutes long and are made available on the Agency's website at:

<https://www.vcpublicworks.org/wp/waterresourcesdivision/countystormwaterprogram.>

These videos shall be considered acceptable to satisfy the annual stormwater training requirements.

The Ventura County Stormwater Program oversees the areas of unincorporated Ventura County for the Federally-mandated stormwater management program. The Program implements requirements and ensures compliance under Ventura Municipal Stormwater Permit Order No. R4-2021-0105. The program addresses activities including development of project conditioning, construction site inspections, illicit discharge investigations and enforcement, business compliance inspection, public outreach/education and employee and contractor training.

1000-13 BIRD SURVEY

Shortly before construction begins, County will conduct a bird survey with its own forces. It is possible that the survey will find active nesting birds near proposed work areas, and this may result in some of the work being delayed or deleted. Contractor shall accept this as a contract condition and shall cooperate with County directions if bird-related impacts occur.

1000-14 MEASUREMENT & PAYMENT

Payment for complying with these General Requirements Special Provisions

shall be considered included in the prices paid for other items of work and no additional compensation will be made.

1001 PUBLIC ACCESS & NOTICE

1001-1 SCOPE

Contractor shall provide public notifications and maintain public access through the work area as directed by the Engineer and described within these special provisions.

1001-2 NOTICE TO RESIDENT/BUSINESS/INSTITUTION

The Contractor shall notify all adjacent residents, businesses, and institutions **one week** prior to starting any work, using "door-knob" type notices. These notices will notify affected people within the area of impending work. The notice shall be worded as shown on Appendices or as approved by the Engineer.

1001-3 PARKING RESTRICTIONS

The Contractor shall furnish and place "No Parking" signs, 12" x 18" minimum size as approved by the Engineer, along the street, in front of every residence affected by the work, three working days in advance of any work. In rural areas, the signs shall be placed at a spacing not exceeding 400 feet. The signs shall include the day and the time during which parking is not permitted.

Parking restrictions shall be limited to periods of up to five calendar days at a time, when work requires it. Parking restrictions shall not be posted for the entire duration of the project or for periods longer than five days between work activities. Parking restrictions shall be limited to the interval between 7:00 a.m. and 5:00 p.m. to allow for parking during the night. The Contractor shall remove signs immediately when they are no longer needed.

If the work is delayed or rescheduled for any reason after placement of "No Parking" signs, the Contractor shall re-date the signs affected. If the work is delayed more than five days, the Contractor shall notify local authorities, remove the signs, and place re-dated signs two days in advance of the work.

1001-4 ACCESS

The Contractor shall provide property owners and residents with access to their properties at all times except when construction operations make access to properties impractical or unsafe, in accordance with the Plans, the Standard Specifications and these Special Provisions.

Emergency vehicles shall be granted access at all times.

1001-5 MEASUREMENT & PAYMENT

Payment for Public Access and Notice shall be considered included in the prices paid for other items of work and no additional compensation will be made.

1002 MOBILIZATION

1002-1 SCOPE

In addition to the work specified in VCSS 7-3.4.1, Mobilization includes work, services and operations necessary to establish access to the project site, restoration of such areas to their original conditions or to a condition approved by the Engineer, the movement of labor, supplies, equipment and incidentals to and from the project site, applying for and obtaining all required permits, and for all other work for which costs are incurred prior to or after performing work of other Contract items.

1002-2 MEASUREMENT & PAYMENT

Measurement and Payment for Mobilization shall be made in accordance with 7-3.4.2 of the Standard Specifications. The lump sum price shall be considered full compensation for all labor, materials, and equipment necessary to mobilize and completely demobilize.

1003 TRAFFIC CONTROL & CONSTRUCTION SIGNING

1003-1 SCOPE

The Contractor shall be responsible for maintaining Traffic Control in accordance with the provisions of 5-9 of the Standard Specifications, 12-3 and 56-2 of the SSS, SSP T11, T12, or T13, the current requirements set forth in the California Manual on Uniform Traffic Control Devices (California MUTCD 2014, Rev. 9)) adopted on April 1, 2025 by the California Department of Transportation, and these Special Provisions.

The Contractor shall notify the Engineer and County Traffic Engineer at (805) 654-2589 of its intention to begin work at least ten working days before starting any work.

The Contractor shall replace all STOP bars the same day they are removed by grinding or paving, as indicated in Pavement Delineation and Striping of these Special Provisions.

1003-2 TRAFFIC CONTROL

The Contractor shall be responsible for handling vehicular and pedestrian traffic in accordance with 5-9 of the Standard Specifications and these Special

Provisions.

The Contractor shall submit in writing, for approval by the Engineer, an Order of Work and Traffic Control Plan (graphic form) at least five working days prior to beginning work on the project site. No work on site shall begin until such approval is obtained.

The Traffic Control Plan shall include map(s) and descriptions indicating the location of work areas, intersecting streets, construction signing, and text used for changeable message signs, and timing of Advance notice. The Plan shall be updated and re-submitted for approval as necessary to accurately reflect the Contractor's planned operations.

Traffic Control Plans shall include Caltrans and/or other Local Agencies Encroachment Permit work areas.

Traffic control signs shall be covered or removed when not in use.

In areas of high volume pedestrian traffic, such as schools and shopping centers, the Contractor shall provide for controlled pedestrian crossings through the work or schedule work to avoid peak pedestrian volumes. Crossings shall provide pedestrians a means of passing over or through the work without tracking tack coat or hot asphalt concrete.

At intersections, if a cross road needs to be temporarily closed when work is in progress through the intersection and the anticipated traffic delay is more than five minutes, a detour sign shall be installed on the cross road and shall include the installation of a changeable message sign displaying the anticipated delay time. The signing shall be approved by the Engineer.

When two-way traffic is restricted to one lane, and when applying the resurfacing treatment past intersecting roads, traffic shall be controlled as shown on SSP T13. A pilot car and driver will be required at various locations if control by flaggers proves deficient in the opinion of the Engineer.

Overnight parking of construction equipment on adjacent County roads is not permitted. If construction equipment is parked on the shoulder area overnight, barricades and other suitable warning devices shall be placed around the equipment. No part of the equipment shall be less than 4 feet from the edge of pavement.

1003-3 CONSTRUCTION SIGNING

Construction Signing shall consist of furnishing, installing, maintaining and removing construction signs and barricades.

A "Road Work Ahead" sign (W20-1) mounted on either a 4" x 4" wood post or a Type III barricade shall be installed at each approach in accordance with SSP

T11, T12, or T13. The signs for each road shall be installed prior to starting work on that road and shall not be removed until all work has been completed on that road.

When locations are changed, the full traffic control system shall be in place at the new location prior to starting any work and shall not be removed until all work has been completed at that location.

1003-4 TEMPORARY GUIDE MARKERS

Temporary Guide Markers shall be portable delineators as specified in 12-3.04 of the SSS and these Special Provisions. Only one type of Temporary Guide Marker shall be used at any one time.

Temporary Guide Markers shall be placed adjacent to the edge of all slurry seals, at such locations as called for elsewhere in this Section, and as directed by the Engineer. Spacing of Temporary Guide Markers shall not exceed 30 feet on tangents or 15 feet on curves.

Temporary Guide Markers shall be placed at the required locations prior to sundown on the same day the slurry seal is placed. Temporary Guide Markers shall be left in place along the completed edges of pavement and maintained, repaired, and replaced as required until the work is completed. If the Temporary Guide Markers are damaged, displaced, or are not in an upright position, from any cause, said markers shall immediately be replaced or restored to their original locations, in an upright position by the Contractor. Upon completion of the project, all components of the temporary traffic control system shall be removed from the work site.

1003-5 GENERAL WORK SEQUENCE & RESTRICTIONS ON CLOSURE OF TRAFFIC LANES

The full width of the traveled way on all roads shall be open for use by public traffic on Saturday, Sunday and any day designated by the Agency as a holiday, after 3:00 p.m. on Friday, after 3:00 p.m. on the day preceding an Agency-designated holiday, and when construction operations are not actively in progression working days. Days designated by the Agency as holidays are listed in 6-3.2.3.1 of the Standard Specifications.

Contractor shall keep at least one lane of traffic open at all times during working hours and one lane in each direction open at all other times. Contractor's equipment and personal vehicles of the Contractor's employees shall not be parked on the traveled way, or on any section where traffic is restricted at any time. Overnight parking of construction equipment on adjacent county roads is not permitted.

Changeable message signs displaying the construction start and end dates, shall be placed at each end of Lockwood Valley Rd—at its approaches to

project work zones—a minimum of two weeks before commencing construction or as directed by the Engineer.

A changeable message sign displaying the anticipated delay time shall be placed at each end of lane closure and at the approaches to any side streets within the lane closure.

1003-6 ROAD CLOSURES

Except as provided herein, road closures are generally not allowed, and the Contractor shall maintain one lane of traffic through the work area at all times. Limited road closures may be allowed under unusual circumstances, subject to advance approval by the Engineer and public notice.

If in the Engineer's opinion, the Contractor demonstrates that a 12-foot wide lane cannot be maintained through the work area or demonstrates that a partial closure would be in the best interests of the Agency and minimizes public inconvenience, a limited road closure may be approved. Prior to approval of any limited road closure, the Contractor shall prepare a site-specific traffic control (detour) plan 10 days prior to the intended date of the road closure for approval by the Engineer. The traffic control (detour) plan shall include notice to the public with placement of changeable message signs at least 72 hours prior to physically closing the road.

1003-7 MEASUREMENT & PAYMENT

Payment for Traffic Control and Construction Signing shall be made at the contract lump sum price. Such payment will be considered full compensation for furnishing and installing all materials, labor, equipment and all incidentals necessary to complete the work in accordance with the Standard Specifications and these Special Provisions.

1004 WATER POLLUTION CONTROL

1004-1 SCOPE

This item shall consist of preventing, controlling, and abating discharges of pollutants from the construction site, and shall be performed in accordance with the Standard Specifications and these Special Provisions. The Contractor shall prepare and submit a Storm Water Pollution Control Plan (SWPCP), template included in the appendices, covering pollution control measures and best management practices in general for all locations. The Contractor shall self-certify that they have completed all the necessary Ventura County annual stormwater training requirements.

1004-2 CONSTRUCTION METHODS

All work for Water Pollution Control proposed by the Contractor shall be approved by the Engineer. All work shall be performed in accordance with 3-12 of the Standard Specifications.

If the Contractor determines that discharge of groundwater to surface water will be necessary to complete the work, the Contractor shall obtain a Waste Discharge Permit under General NPDES Permit No. CAS004004 from the California Regional Water Quality Board, Los Angeles Region. The Contractor may be given an extension of time to obtain the Water Discharge Permit based on a written request to the Engineer in accordance with 6-4 of the Standard Specifications.

1004-3 MEASUREMENT & PAYMENT

Payment for Water Pollution Control shall be made in accordance with 3-12.6.7. The contract lump sum price for Water Pollution Control shall be considered full compensation for obtaining and complying with all necessary permits and installation and removal of Water Pollution Control works, including all labor, materials, tools and equipment and all other necessary incidental items required to complete the work.

1005 EXISTING UTILITY & ROADWAY FACILITIES

1005-1 SCOPE

Work shall conform to the provisions in Section 6-4.1.1 of the Standard Specifications and these Special Provisions.

Prior to commencing work on streets, the Contractor shall document or mark the location of each utility valve box, lid, cover, manhole, vault, cleanout, or any other utility access at the road surface that will be covered by the new pavement with two swing ties or perpendicular offsets to a marker or fixed feature at the side of the road. These swing ties or offset measurements shall be written in an organized manner and provided to the Engineer. The Contractor shall demonstrate the utility markings to the Engineer and receive acceptance prior to paving any street.

The Contractor shall remove wasted material from the interior and exterior of manholes, valve boxes, storm drains, gutters or other facilities.

All manholes, valve covers and cleanouts shall be covered with roofing paper prior to paving operations in order to permit easy removal of the materials. Covers that are partially exposed shall be cleaned to the satisfaction of the Engineer.

The Contractor shall contact Underground Service Alert and the respective utility companies at least two working days prior to starting any work on each road by which those companies are affected.

The Contractor shall provide access to utility owners at all times during the construction life of the project. The Contractor shall coordinate work by others in accordance with 2-4 of the Standard Specifications.

1005-2 UTILITY CONTACTS

Utility contacts sorted by services area are included in the appendices.

The Contractor shall notify the Engineer and the Utility Company and request written authorization to proceed from the Engineer prior to potholing any utility crossings.

1005-3 ROADWAY FACILITIES

The Contractor shall protect existing Roadway Facilities, including but not limited to, curbs, curb and gutters, cross gutters, spandrels, traffic striping, from being disfigured by overspray of materials or by tracking of materials by equipment used in the project. If such overspray or tracking does occur, the Contractor shall, at its own expense, clean, restore, or replace disfigured items to the satisfaction of the engineer.

Existing Signs, Clearance Markers and Delineators within the existing pavement area or which interfere with the Contractor's work on any road to be rehabilitated, shall be removed, and re-installed at their original locations after completion of work on that road. The Contractor shall exercise extreme caution when removing the markers or delineators. Damaged markers or delineators shall be replaced at the expense of the Contractor.

The Contractor may trim back trees and shrubbery encroaching on the public road right-of-way or interfering with this work. Contractor shall obtain permission from the Engineer to trim trees or shrubbery on private property.

1005-4 MEASUREMENT & PAYMENT

Payment for costs incurred in protecting and marking existing utilities and roadway facilities, including all of the requirements set forth in this section, shall be considered included in the prices paid for other items of work and no additional compensation will be made.

1006 DIVERSION, CONTROL AND REMOVAL OF WATER

1006-1 SCOPE

This item consists of the Diversion, Control, and Removal of all water entering or encroaching the construction area or otherwise affecting construction activities and shall be performed to the extent possible in accordance with the

“Water Diversion Guide”, dated 2019, in **Appendix X** and the Water Diversion Plan in Appendix Y and to the satisfaction of the Engineer.

1006-2 CONSTRUCTION METHODS

All permanent construction shall be performed at a site free from water unless otherwise provided for in these Special Provisions. The Contractor shall construct, maintain, and operate all necessary cofferdams, k-rail, pumps, channels, flumes, drains, well points, and/or other temporary diversion(s), and water removal works required for diversion, control and removal of all water, whether surface or groundwater, whatever its source, during construction.

Inundation of partially completed Work due to lack of control during non-working periods will not be permitted and may be cause for requiring repair or removal and replacement of Work already completed.

The Contractor shall be responsible for obtaining permission for the use of any property in addition to that provided for in the Plans and Specifications, which may be required for the diversion and water removal works so as not to create a hazard to persons or property or to interfere with the water rights of others.

It shall be understood and agreed that the Contractor shall hold the Agency and Engineer harmless from legal action taken by any third party with respect to construction and operations of the diversion and protective works.

1006-3 MEASUREMENT & PAYMENT

This special provision section replaces section 3-12.7.4 “Payment” of the Standard Specifications. Payment for Diversion, Control and Removal of Water will be computed by the Engineer based on their estimate of the percentage completion of this item of work. This computation will be proportional to the percentage completion of the major items of work to which diversion of water is incidental. Payment will be made on a Lump Sum basis per the Contract bid item price.

The Contract price for such work shall include full compensation for all necessary labor, equipment, materials, tests, installation, operation, maintenance, and removal of diversion and control devices, regardless of the number of times required to achieve completion of the work.

1007 DEMOLITION & EXPORT

1007-1 SCOPE

Demolition and Export shall include required excavation and removal of material(s) for the construction of roadway sections, embankments, culverts, headwalls, wingwalls, foundations, riprap aprons, and any other structures as

indicated on the Plans and in these Special Provisions.

Demolition and Export shall conform to SSPWC Section 300-2 "Unclassified Excavation" which includes roadway and shoulder excavation, unless separately designated in these Special Provisions. Demolition and Export shall also conform to SSPWC Section 401 "Removal" for materials that shall be removed or disposed of outside the Work area.

1007-2 CLEARING AND GRUBBING

The Contractor shall perform Clearing and Grubbing in accordance with 300-1, "Clearing and Grubbing," of the SSPWC. Clearing and Grubbing shall include removal of existing vegetation and organics from all cut and fill areas, eradication of all weeds in the roadway and shoulders within 5 feet of the limits of grading as shown on the Plans, and cleaning shoulders from any sloughing dirt or debris within the construction limits. Eradication of vegetation shall include cutting and treatment of the root with an EPA-approved herbicide with an approved color dye. Use only enough herbicide to properly treat roots. Clearing and Grubbing shall include removing and disposing of all vegetation, rubbish, and debris and any other objects in conflict with the proposed construction, adjacent to existing facilities or identified on the Plans for removal. Depressions and disturbed areas left from removals shall be replaced and compacted with suitable fill.

Existing trees not in conflict with the proposed construction or those specifically identified on the plans to be preserved and protected, shall be preserved and protected at all times. If any such trees are damaged, they shall be replaced in kind with the same type and size and maintained until established, as directed by the Engineer, at the Contractor's own expense.

SAWCUT

This work consists of sawcutting existing pavement to a neat line and depth as shown on the Plans and as marked in the field. Sawcutting using a grinding wheel will not be permitted.

CULVERT CLEARING

If required by the Engineer, the Contractor shall clean and jet the culvert using a vacuum truck to clean all debris and soil from the entire length of the culvert identified on the Plans. Contractor shall expose all inside surfaces of the specified culvert. Culvert shall not be moved or damaged. Contractor shall dispose of material to an approved waste facility or as directed by the Engineer.

REMOVAL OF EXISTING CULVERT

Removal of existing culvert shall include removal and disposal of damaged and severed corrugated metal pipe, as shown on the Plans, to accommodate

installation of new 24" RCP extension and headwall.

DITCH CLEARING

Ditch maintenance shall include clearing and grubbing as necessary, vegetation removal, debris removal, hauling, grading, and stabilization of existing ditches. Excessive debris shall be removed from ditches and sloughing dirt shall be graded such that the ditch has approximately a 1.5:1 slope or flatter, where feasible, and provides gravity drainage and conveyance of water through the existing ditch and culvert system.

1007-3 CONSTRUCTION METHODS

The Contractor shall remove rubble, debris and mud flow from the roadway, shoulders, and ditches, and clear culverts as directed by the Engineer or as shown on the Plans. If directed or approved by the Engineer, material may be reutilized as Unclassified Fill in accordance with Sections 217-3 and 300-3.5 of the SSPWC. Reutilized earth may be used to fill in washouts, repair shoulders, and/or for erosion control. Material that is unsuitable or cannot be reutilized as determined by the Engineer shall be exported and recycled appropriately. Contractor shall track all materials and debris moved using Appendix **X**.

Prior to any excavation, the Contractor shall establish and confirm utility locations and depth of utilities as well as fulfill any necessary requirements from Underground Service Alert (USA).

Excavation shall be performed in accordance with Sections 300-2, 300-3, and 300-7.3 of the SSPWC.

1007-4 MEASUREMENT & PAYMENT

Payment for Demolition and Export shall be made at the contract lump sum price. Such payment shall be considered full compensation for furnishing all materials, labor, equipment, tools, and all incidentals for clearing and grubbing, sawcutting, excavating, loading, transporting, and disposing of surplus or unsuitable material as specified by the Standard Specifications and these Special Provisions, and no additional compensation will be allowed.

1008 UNCLASSIFIED FILL

1008-1 SCOPE

The work under this section includes preparation, placement, conditioning and compaction of fill material generated from Unclassified Excavation, for the construction of roadway sections, shoulders, embankments, or as indicated on the Plans.

CONSTRUCTION METHODS

Excavation shall be performed in accordance with Sections 300-2 and 300-7.3 of the SSPWC.

Placement of Unclassified Fill shall conform to SSPWC Section 300-4.

Material from Demolition & Export may be reutilized as determined by the Engineer in accordance with 217-3 and 300-3.5 of the SSPWC. Reutilized earth may be used to backfill washouts, repair shoulders and ditches, and for erosion control.

Areas over which fills are to be placed shall first be cleared and grubbed in accordance with SSPWC Section 300-1 and these Special Provisions. Areas over which fill is to be placed shall be scarified to a depth of 6-inches, moisture conditioned to within 2 percent of optimum moisture, and recompacted to a relative compaction of at least 95 percent (i.e. 95 percent of the maximum dry density determined by ASTM D1557).

Each layer of earth fill shall be compacted by mechanical means acceptable to the Engineer. Unless otherwise specified, earth fill shall be compacted to a relative compaction of at least 95 percent in accordance with Section 301-1.3 of the SSPWC.

Fill slopes shall be finished in conformance with the lines and grades shown on the Plans. Any fill beyond the limits shown on the Plans or required in these Special Provisions, without the authorization of the Engineer, will be at the Contractor's expense.

1008-2 MEASUREMENT & PAYMENT

Payment for Unclassified Fill will not be measured in the field but will be based upon the typical sections shown on the Plans.

Payment for Unclassified Fill shall be based on the Engineer's Estimate and is a Final (F) Pay Item. Such payment shall be considered full compensation for furnishing all labor, materials, equipment, tools and all incidentals necessary to complete the work including all transport, stockpiling, preparation, placement, grading, conditioning and compaction, and no additional compensation will be allowed.

1009 IMPORTED FILL

1009-1 SCOPE

The work under this section consists of Imported Fill intended for the

construction of roadway sections, shoulders and embankments, including rock slope protection (RSP) and riprap aprons, or as indicated on the Plans. Imported Fill shall also include preparing the area on which fill is to be placed, as well as the depositing, conditioning, and compacting of fill material to the requirements described in these Special Provisions.

CONSTRUCTION METHODS

Imported Fill shall be structural backfill material imported from outside the Work site and shall conform to Section 217-3 of the SSPWC and these Special Provisions.

A sample of the proposed material shall be delivered to the Engineer no less than 10 days prior to its intended use. The sample shall have a minimum dry weight of 100 pounds and shall be clearly identified as to source, including street address and community of origin. The Engineer will determine the material's suitability for use as imported fill. Should the imported fill material delivered to the Work site substantially differ from the approved sample, it shall not be used for backfill and shall be removed from the Work site at the Contractor's expense.

Areas over which fills are to be placed shall first be cleared and grubbed in accordance with Standard Specification 300-1 and these Special Provisions. Areas over which fill is to be placed shall be scarified to a depth of 6-inches, moisture conditioned to within 2 percent of optimum moisture, and recompacted to a relative compaction of at least 95 percent (i.e. 95 percent of the maximum dry density determined by ASTM D1557).

Each layer of earth fill shall be compacted by mechanical means acceptable to the Engineer. Unless otherwise specified, earth fill shall be compacted to a relative compaction of at least 95 percent in accordance with Section 301-1.3 of the Standard Specifications.

Fill slopes shall be finished in conformance with the lines and grades shown on the Plans. Any fill beyond the limits shown on the Plans or required in these Special Provisions, without the authorization of the Engineer, will be at the Contractor's expense.

1009-2 MEASUREMENT & PAYMENT

Payment for Imported Fill will be made at the Contract Unit Price per cubic yard placed. Such payment shall be considered full compensation for furnishing all labor, materials, equipment, tools and all incidentals necessary to complete the work including all sampling, testing, transport, stockpiling, placement, grading, conditioning and compaction, and no additional compensation will be allowed.

1010 SLURRY CEMENT BACKFILL

1010-1 SCOPE

This work includes Slurry Cement Backfill for backfill of concrete headwall at MP 12.69 and shoulder repair as shown on the Plans.

1010-2 MATERIALS

Slurry Cement Backfill material, unless otherwise approved by the Engineer, shall be Class 100-E-100 (60-E-0.7) and conform to SSPWC Sections 201-1 and 201-6.

CONSTRUCTION METHODS

Slurry Cement Backfill shall be placed per Section 201-6.6 of the SSPWC and performed in accordance with Section 306-12 of the SSPWC. Where it becomes necessary to excavate beyond the limits of normal excavation lines in order to remove boulders or other interfering objects, the voids remaining after the removal of boulders or obstructions shall be backfilled and compacted as approved by the Engineer.

1010-3 MEASUREMENT & PAYMENT

Payment of Slurry Cement Backfill shall be made at the contract unit price per cubic yard placed. The contract price for such work will include full payment for all materials, labor, equipment, and other incidentals required to place Slurry Cement Backfill, in accordance with the Plans and Special Provisions, and no additional compensation will be allowed.

1011 ROCK (RIPRAP) SLOPE PROTECTION

1011-1 SCOPE

Work under this section consists of constructing Rock Slope Protection on Lockwood Valley Rd at the limits indicated in the Plans. The rock (riprap) used shall be in accordance with Section 200-1.6.2 of the SSPWC. Rock Slope Protection shall be underlain with non-woven filter fabric on 95% compacted subgrade at location shown in the Plans or as directed by the Engineer.

1011-2 MATERIALS

Riprap shall be 1-Ton Class VIII per 200-1.6.2 of the SSPWC and shall comply with Section 200-1.6.3.

Filter Fabric shall be Non-Woven 180 N per 213-5 of the SSPWC.

CONSTRUCTION METHODS

The subgrade and slope shall be prepared to the required lines and grades on the Plans or as directed by the Engineer. All fill required in the subgrade shall be compacted in lifts of 4 to 6 inches to a density of 95% relative compaction.

Filter fabric shall be protected from punching, cutting, or tearing. Any damage other than an occasional small hole shall be repaired by placing another piece of fabric over the damaged part or by completely replacing the fabric. All overlaps, whether for repairs or for joining two pieces of fabric shall be a minimum of one foot.

Rock shall be placed by equipment. Do not place rocks by dumping. Place rocks on the slope such that their longitudinal axis is normal to the face of the embankment. Place foundation course rocks such that they are in contact with the subgrade. For rocks above the foundation course, place them such that each rock has a 3-point bearing on underlying rocks; do not bear them on smaller rocks which may be used for chinking voids. Limits of the rock slope protection shall each be constructed to the dimensions indicated on the Plans and in such a manner as to avoid displacement of underlying materials.

Rock slope protection voids shall be backfilled using native river fill material (i.e. sand and/or cobble fines) to create natural recruitment pockets and micro-retention of fines and seed.

1011-3 MEASUREMENT & PAYMENT

Payment for construction of Rock Slope Protection shall be made at the Contract Unit Price per Ton of Riprap rock placed. Such payment shall be considered full compensation for furnishing all labor, equipment, tools, and material, including, but not limited to, filter fabric, riprap, cobble, and native river fill as well as incidentals necessary to complete the work such as subgrade preparation, excavation and backfill.

1012 FILTER MATERIAL

SCOPE

This item shall consist of furnishing and installing the filter materials under the 1-Ton rock (riprap) slope protection and shall be performed in accordance with the Standard Specifications, the Plans, and these Special Provisions.

MATERIAL

Filter Materials, in place, shall conform to quality requirements as specified in Section 200-1.4 of the SSPWC, except that the specific gravity shall be a minimum of 2.3. Soundness loss determined by California Test Method No. 214 shall not exceed 10%.

Filter materials A and B shall conform to the following gradations, respectively:

SIEVE SIZE	PERCENT PASSING	
	FILTER A	FILTER B
9"	95-100	
6"	70-90	
3"	40-70	
2"	20-60	
1"	10-50	
3/4"	0-5	90-100
1/2"		75-95
3/8"		50-90
#4		20-70
#8		5-30
#16		0-5

CONSTRUCTION METHODS

Foundation surfaces and trenches shall be clean and free of organic matter, loose soil, foreign substances, and standing water when Filter B is placed. Earth surfaces upon or against which Filter B will be placed shall not be scarified.

Filter Material B shall be constructed to the neat lines and grades shown on the Plans, and may be placed by dumping and spreading using any suitable equipment or as approved by the Engineer. Care shall be exercised to prevent contamination with native or deleterious material.

Filter Material B shall be compacted to 9-inch layers using at least three (3) passes of hand directed vibration plate or roller compaction equipment. Unless otherwise indicated, Filter Material B shall be compacted to a relative compaction of at least 95%.

At the time of compaction, the moisture content of the material shall be such as to insure a firm and unyielding surface.

Filter Material A shall be placed to a 9-inch thick layer as shown on the Plans. No mixing of Filter A and B will be allowed. Contractor shall follow special placement methods to ensure compliance with the details on the Plans. Unless otherwise indicated, Filter Material A shall be compacted to a relative compaction of at least 90%.

MEASUREMENT AND PAYMENT

Filter Materials A and B will be measured to the neat lines as shown on the typical section and the cross sections in the Plans. No adjustment will be made for changes in the excavation cut slopes, or over-excavation not specifically required by the Engineer for Filter Material A, or spillage of Filter Material B. Measurement and payment for Filter Materials A and B shall be made on a cubic yard basis at the contract unit price bid for each bid item, respectively. Such payment shall be considered full compensation for furnishing all labor, materials, tools, equipment, testing, services, and all incidentals required to perform and complete the installation of the Work required in this section or in the Plans.

1013 24" REINFORCED CONCRETE PIPE (RCP) CULVERT EXTENSION

1013-1 SCOPE

24-inch RCP Culvert Extension shall consist of furnishing and installing a 16-linear foot reinforced concrete pipe extension, including concrete collar connection, as shown on the Plans and described in these Special Provisions.

1013-2 MATERIAL

Unless otherwise approved, materials used to manufacture the RCP culvert shall conform to the requirements of Sections 207-2.2 and 207-2.6 of the SSPWC. Reinforcement for the culvert shall conform to Section 207-2.4 of the SSPWC.

1013-3 CONSTRUCTION METHODS

Installation of the RCP culvert shall be in accordance with 306-7.3 of the SSPWC. All work necessary for any given length of pipe placed, including excavation bedding, pipe placement and backfill shall be accomplished during the same workday. Culvert Pipe and Pipe Extensions shall include the connection to the existing pipe. Pipe sizes are shown on the Plans.

Reinforced Concrete Collar for connection to existing CMP shall conform to 380-4 of the SPPWC and 306-7.3.2.2 of the SSPWC.

1013-4 MEASUREMENT & PAYMENT

Payment for 24-inch RCP Culvert Extension shall be made at the contract unit price per linear foot. Such payment shall be considered full compensation for constructing and testing all pipe culvert in place and furnishing all labor, equipment, tools, materials including bands, anchors, collar(s), elbows, fittings, minor concrete, subgrade preparation and minor grading, removal of rocks and boulders, trenching, pavement repair, and incidentals necessary to complete

work including subgrade preparation, water diversion, and structural excavation.

1014 CONCRETE STRAIGHT HEADWALL

1014-1 SCOPE

Construction of headwalls shall conform to the provisions in Section 51, "Concrete Structures," Section 52, "Reinforcement," Section 75, "Miscellaneous Metal" and other applicable subsections of the SSS, SSP, the Plans and these Special Provisions.

MATERIALS

The minimum required 28-day compressive strength for Concrete Straight Headwall shall be 3,600psi and prepared in accordance with Section 51-1.02B of the SSS.

Reinforcement bar shall be furnished and installed per the Caltrans Standard Plan D90 Type B and B3-1A Type 1 (Case 1).

CONSTRUCTION METHODS

Contractor shall conform to requirements provided in Section 51-1.03 "Construction" of the SSS.

The existing soil material directly below the proposed headwall shall be over-excavated and recompact to provide a firm, uniform bearing layer. Removals below the proposed headwall shall extend 12 inches below structure.

The Contractor's attention is directed to the probability of encountering rock and surface water during construction of the headwall. The Contractor shall reroute surface water as required. In no case will surface water be allowed to come into contact with wet concrete.

1014-2 MEASUREMENT & PAYMENT

Payment for construction of Concrete Headwalls will be made at the Contract Unit Price for each as indicated on the Bid, Plans and Special Provisions. Such payment shall be considered full compensation for furnishing all labor, equipment, tools, forms, rebar, minor concrete, and performing all pertinent and required work including, but not limited to, subgrade preparation, structural excavation and backfill, sawcutting, and any removal or replacement of existing pavement, berms, rocks or boulders, and incidentals necessary to complete the work such as water diversion.

1015 TACK COAT

1015-1 SCOPE

Tack Coat shall be used to adhere new Asphalt Concrete pavement to existing pavement.

1015-2 MATERIAL

Tack Coat shall be Thermoplastic Polymer Modified High Performance Seal, also known as HPS No-Track Tack, manufactured by Paramount Petroleum, no known equal.

1015-3 CONSTRUCTION METHODS

The tack coat shall not be applied until the preparation of the existing surface has been completed, and then only so far in advance of placing the asphalt concrete overlay as permitted by the Engineer. Tack coat shall not be applied when the temperature of the surface to be tacked is below 50° F in the shade. No tack coat shall be applied when rain is imminent.

No tack coat shall be left exposed overnight. Immediately in advance of placing the asphalt concrete, additional tack coat shall be applied as directed by the Engineer to areas where the tack coat has been destroyed or otherwise rendered ineffective, and no additional compensation will be allowed for such work.

Tack coat shall be heated slowly to temperature between 325-425 degrees F. At no time shall the product be heated to above 450 degrees F. The product shall be applied through a distributor truck equipped with a heating unit. It shall be equipped with a full circulating spreader bar and pumping system capable of applying the tack coat material within 0.05 gallons per square yard tolerance of the specified application rate and give a uniform covering of the surface to be treated. The distributor shall also include tachometer, pressure gauge, and volume measuring device and thermometer.

The application rate shall be between 0.12 to 0.15 gallons per square yard and the rate to be determined by the prevailing surface conditions or as approved by the Engineer.

The Tack Coat shall not be applied until the preparation of the existing surface has been completed, and then only so far in advance of placing the asphalt concrete overlay as permitted by the Engineer. The Engineer will determine if the pavement is sufficiently clean and dry for the application of Tack Coat.

Existing concrete surfaces shall be protected against disfigurement from the asphalt. Residue of the material shall be removed by sandblasting to the extent required by the Engineer.

1015-4 MEASUREMENT & PAYMENT

Payment for Tack Coat shall be considered included in the prices paid for Asphalt Rubber Hot Mix (ARHM) and no additional compensation will be made.

1016 ASPHALT RUBBER HOT MIX (ARHM)

1016-1 SCOPE

Asphalt Rubber Hot Mix shall be constructed in accordance with the Plans, Section 302-9 of the SSPWC, and these Special Provisions. The dimensions of the road(s) indicated on the Plans is considered approximate.

1016-2 MATERIALS

Material for overlays shall be ARHM GG-C Asphalt Concrete with PG 64-16 binder as specified on the Plans and in accordance with 203-11 of the SSPWC and these Special Provisions. In addition to the requirements of 203-6.7.3.2 of the SSPWC, a certificate of calibrated batch scales per California State Test 109 from the batch plant supplying the material is required.

1016-3 DISTRIBUTION & SPREADING

New longitudinal joints shall be located as approved by the Engineer with the following order of preference:

1. Longitudinal joints shall be located a minimum of two feet away from existing longitudinal joints.
2. Longitudinal joints shall not be placed in wheel paths.
3. Longitudinal joints shall occur within one foot of lane lines or the center line.

The full width of undivided roadway shall be paved such that no unfinished longitudinal joints of asphalt concrete exist at the end of the workday.

The third sentence included in 302-9.4 of the Standard Specifications is hereby deleted and replaced with the following:

“Asphalt Rubber Hot Mix shall not be placed unless the atmospheric temperature is at least 55°F and rising or during suitable weather.”

In addition to the requirements of 302-9.4 of the SSPWC, asphalt concrete shall be placed with spreading equipment equipped with fully automatic screed and grade sensing controls, which shall control the longitudinal grade of the screed. Automatic controls shall conform to and be operated in accordance with the following provisions.

Unless approved otherwise, ski-type devices, with a minimum length of 30 feet, shall be used to provide a reference for the grade sensor. Skis shall be constructed and installed in such a manner that a reference to the average elevation of the existing pavement, along the length of ski, is maintained at the sensor point. When placing surfacing adjacent to surfacing previously placed in conformance with these provisions, a joint matching shoe of adequate size and type to properly sense the grade of the previously placed mat, may be used in lieu of the 30-foot ski.

The ski shall be mounted at a location, which will provide an accurate reference for the surfacing being placed. This may require the ski to be mounted ahead of, and inside the outer limits of the screed. Automatic cross slope control may be accomplished by use of a ski and grade sensor on each side of the paving machine.

Automatic screed controls shall be installed in such a manner that the occasional manual adjustments, necessary to maintain the attitude of the screed parallel to the underlying pavement, are readily accomplished. Automatic screed controls shall be installed so that with little or no delay, use of the automatic controls can be discontinued, and the screed controlled by manual methods.

Should the automatic screed controls fail to operate properly during any day's work, the Contractor may use manual control of the spreading equipment for the remainder of that day, provided the quality of the work conforms to the requirements of 302-5 of the SSPWC. Should the methods and equipment used for automatic control fail to result in the quality of work required by said 302-5 of the SSPWC, the paving operations shall be temporarily discontinued, and the Contractor shall make the necessary changes to the equipment, or furnish other equipment conforming to the requirements herein, before paving is resumed.

If it is determined by the Engineer that the existing grade and cross slope is too irregular for the automatic controls to provide the quality of work required, the use of the automatic controls shall be discontinued, and the spreading equipment adjusted by manual methods. Use of the automatic equipment shall be resumed when the Engineer has determined that it is again practical and so orders

Base repairs, as specified in these Special Provisions, shall be accomplished in advance of the paving operation. Repair of potholes may be accomplished directly in front of the leveling course operation using material taken from the hopper of the paving machine as directed by the Engineer.

Placement of a seal coat of SS1h emulsion in accordance with 203-3 of the SSPWC is required at areas where new pavement meets existing asphalt concrete.

1016-4 ROLLING

In addition to the requirements of 302-5.6 of the SSPWC, the number of rollers required for each paving operation shall be such that all rolling for density shall be completed before the temperature of the asphalt concrete mixture drops below 290°F.

Breakdown rolling shall commence when the asphalt concrete is placed. Rolling shall be accomplished with the drive wheel forward and with the advance and return passes in the same line.

Road dust blotter shall be applied in accordance with Section 302-9.7 of SSPWC.

1016-5 COMPACTION TESTING

Engineer will take nuclear gage compaction tests to ensure the minimum 95% compaction requirement is being met. If 95% compaction or better is not achieved, Contractor shall receive decreased payment for AC pavement in accordance with the following:

The Contractor shall reimburse the Agency with the difference between the contract unit price and the reduced unit price for those tons that fall below 95% compaction. The reduced unit price is calculated as follows:

Contract unit price x (1- Reduced Compensation Factor) = Reduced unit price.
Pavement with 93.0% or lower compaction will be removed and replaced by the contractor at no cost to Agency. The amount of reduced compensation will be calculated based on the following table.

Relative Compaction (Percent)	Reduced Compensation Factor	Relative Compaction (Percent)	Reduced Compensation Factor
95.0	0.000	93.8	0.300
94.8	0.050	93.6	0.350
94.6	0.100	93.4	0.400
94.4	0.150	93.2	0.450
94.2	0.200	93.0	0.500
94.0	0.250	LESS THAN 93.0 NO COMPENSATION	

1016-6 INTERSECTIONS

Where AC overlay is required on a through street at an intersection with no concrete cross gutter, the overlay on the cross-street shall extend a distance of ten feet per inch of overlay thickness (including leveling course) past the end of the pavement or curb return unless otherwise marked in the field or as directed by the Engineer.

Existing road surface drainage pattern shall be maintained.

1016-7 SAMPLING

The Engineer will sample the asphalt concrete from the hopper of the paving machine at various intervals. The Contractor shall facilitate the sampling process.

1016-8 MEASUREMENT & PAYMENT

Payment for Asphalt Rubber Hot Mix, complete in place, shall be made at the contract unit price per ton as specified in Section 302-5.9 of the SSPWC and these Special Provisions. The unit prices per ton paid for Asphalt Rubber Hot Mix shall be considered full compensation for all labor, materials, and equipment required to construct roadway sections as indicated in the Plans, Standard Specifications and these Special Provisions.

1017 CRUSHED MISCELLANEOUS BASE (CMB)

1017-1 SCOPE

This work shall consist of placement and construction of the Crushed Miscellaneous Base (CMB) layer with corresponding dimensions and limits indicated on the Plans.

1017-2 MATERIAL

CMB shall conform to the provisions of Section 200-2.4 of the SSPWC and coarse graded per table 200-2.4.2 of the SSPWC.

1017-3 CONSTRUCTION METHODS

CMB for shoulder backing shall be completed no later than seven (7) calendar days after constructing adjacent roadway pavement.

CMB placed under pavement shall be compacted to 95%. Areas not under pavement shall be as specified in Section 211-1 of the SSPWC with each layer of compacted base material having a minimum relative compaction of 90%.

CMB material handling and compaction shall conform with 301-2 of the SSPWC. Base that does not conform to the requirements shall be reshaped or reworked, watered, and thoroughly recompact as necessary to conform to the specified requirements.

Drainage patterns and cross slopes shall be maintained as indicated on the Plans. Where unusual conditions are encountered, the Contractor shall notify the Engineer in advance of performing the work. The Engineer will specify the methodology to be employed to ensure road drainage patterns are not disrupted.

1017-4 MEASUREMENT & PAYMENT

Payment for Crushed Miscellaneous Base (CMB) shall be made at the contract unit price per ton of CMB placed and compacted. The contract unit price paid per ton of CMB shall be considered full compensation for furnishing all labor, material, and equipment and for doing all the work involved in subgrade preparation, furnishing and placing CMB, compacting, reshaping shoulders, and maintaining drainage patterns as specified in these Special Provisions and the Plans.

1018 PAVEMENT DELINEATION, STRIPING & SIGNING

1018-1 SCOPE

Pavement Delineation shall consist of removing and replacing thermoplastic striping, centerline rumble strips, marking, pavement markers, delineators, object markers, signs and posts as shown on the Plans and as directed by the Engineer.

All conflicting or damaged signs within project limits as determined by the Engineer shall be removed and replaced, and shall have a minimum vertical clearance of 7 feet. All signposts shall be 2" x 2" Quick Punch steel posts (12-gauge galvanized square steel tubing) with knock out holes and breakaway pin in accordance with Ventura County Road Standard Plate F-3 and F-4.

On roads to be delineated, prior to removing traffic control, temporary markings shall be placed. Permanent Pavement Delineation on each road to be delineated shall be completed within 14 calendar days following completion of the overlay on that road unless otherwise specified in these Special Provisions. In the event that striping cannot be completed within the specified number of days, the Engineer may order resurfacing operations suspended in accordance with 6-2 of the Standard Specifications to allow striping work to meet schedules specified in these Special Provisions. Centerline striping shall be completed within 10 calendar days after placing overlay. Pavement markers, pavement legends, edge line striping and markings shall be completed within 7 calendar days after completion of work.

1018-2 TEMPORARY MARKINGS

STOP bars: On roads to be delineated and on which permanent delineation will not be applied before public traffic is allowed on the freshly ground or paved surface, Temporary Stop bars shall be placed at stop signs the same day that paving or grinding occurs. Temporary Stop Bars shall be 12 inches wide.

Temporary Markings shall be placed at the centerline of pavement and on multi-lane roads at each lane line the same day that grinding occurs or overlay is placed. Temporary centerline markings shall consist of temporary raised pavement markers (Davidson Plastics Co., M. V. Plastics, or approved equal) at 25-foot maximum intervals. Temporary lane line markings shall be reflective tape or painted spots (cat-tracking) at 50-foot maximum intervals or a painted dribble line. Temporary Markings shall be maintained, replaced, restored or augmented as directed by the Engineer until permanent pavement delineation is completed. When the Engineer determines Temporary Markings as specified herein do not provide adequate temporary delineation, the Contractor shall install Temporary Markings as specified for permanent delineation. All Temporary Markings shall be removed prior to the installation of permanent markings and striping.

1018-3 PAVEMENT MARKERS

Pavement Markers shall be placed in accordance with SSS Section 81-3, SSP A20A through A20D and these Special Provisions. Pavement markers shall include placement of blue fire hydrant markers. The Contractor shall replace any damaged Pavement Markers, without cost to the Agency, prior to the Agency's acceptance of the project.

1018-4 THERMOPLASTIC TRAFFIC STRIPING & PAVEMENT MARKINGS

Thermoplastic Traffic Striping and Pavement Markings shall be 90 mils in thickness and shall conform to Section 84-2 of the SSS and these Special Provisions. The size, color, and spacing of the striping shall be as indicated on the Plans and the State Standard Specifications, State of California, Department of Transportation Standard Plans A20A through A20B and A40D.

1018-5 RUMBLE STRIPS

This work shall consist of replacing centerline Rumble Strips in-kind by grinding indentations in the pavement as indicated on the Plans and as specified in these Special Provisions.

Grinding location shall be as shown in the Plans and as determined by the Engineer for the extent of the project limits.

Construction of Rumble Strips shall conform to State of California, Department

of Transportation Standard Plan A40D and the provisions in Section 84-8, "Rumble Strips," and other applicable subsections of the SSS, SSP and these Special Provisions.

1018-6 MEASUREMENT & PAYMENT

Payment for Pavement Delineation, Striping and Signing will be made at the contract lump sum price. Such payment shall be considered full compensation for furnishing all labor, materials, tools, equipment and incidentals necessary to complete the work.

1019 SURVEY MONUMENT FRAME REPLACEMENT & ADJUSTMENT

1019-1 SCOPE

Ventura County survey monument frames with triangular covers shall be removed, salvaged and replaced to the new finished grade with new monument frames with circular covers. Salvaged triangular covers shall be delivered to the Ventura County Government Center.

Ventura County Survey monument frames with circular covers shall be adjusted to the new finished grade.

When removing and replacing or adjusting frames and covers, the Contractor shall not move, undermine, disturb, or damage in any way, the existing concrete monument cores or their attached metal survey markers.

All Ventura County Survey monument frames and covers to be replaced or adjusted, shall be performed in accordance with the appendices, the Standard Specifications, and these Special Provisions.

1019-2 REPLACEMENT

Existing concrete Survey Monument Frames with triangular cast iron covers shall be removed and replaced with standard Ventura County survey monument cast iron frames, round covers, and PVC slip couplings. The Contractor shall salvage and deliver the old triangular lids and deliver them to the Agency.

The new PVC slip couplings shall be extended upward as needed by placing a section of white, 8" PVC pipe (Class 125 with 9/32" wall thickness) on top of the couplings. The tops of the new frames shall be flush with the new pavement surface.

A standard survey monument kit (frame, cover, and PVC slip couplings) can be purchased at the County Surveyor's public counter, Third Floor, Administration Building, 800 S. Victoria Avenue, Ventura, CA 93009 for \$502.00 plus sales tax

per lot.

1019-3 ADJUSTMENT

Existing standard Ventura County survey monument cast iron frames and round covers that are to be adjusted so that the tops of the existing frames are flush with the new pavement surfaces are listed herein.

The existing PVC slip couplings or vitrified clay pipe and bells at the frames and covers to be raised shall be left in place and shall be extended upward as needed by placing a section of white, 8" PVC pipe (Class 125 with 9/32" wall thickness) on top of the existing couplings or pipe and bells.

1019-4 LOCATION & TYPE OF MONUMENTS

Monuments, which are to be adjusted or replaced and adjusted, are at the locations shown in the appendices.

1019-5 MEASUREMENT & PAYMENT

Payment for Survey Monument Frame Adjustment and Survey Monument Frame Replacement will be made at the contract unit price for each survey monument adjusted or replaced to finished grade. Such payment shall be considered full compensation for furnishing all labor, materials, tools, equipment, and all incidentals necessary to perform the work, complete in place.

1020 TEMPORARY SHORING AND EXCAVATION SAFETY

1020-1 SCOPE

This item shall consist of all the work required to meet the worksite safety requirements of Section 5-7 of the VCSS and 306-3 of the SSPWC. This includes all necessary work for temporary shoring and excavation safety including, but not limited to, trench and retaining wall shoring, confined spaces and personnel safety, and any other equipment, materials, or appurtenances.

SUBMITTALS

Before excavating any trench 5-feet or more in depth, the Contractor shall submit, in accordance with 3-8.2 of the Standard Specifications, a detailed working drawing (shoring plan) showing the design of the shoring, bracing, sloping or other provisions used for the workers' protection.

1020-2 MEASUREMENT & PAYMENT

Payment for Temporary Shoring and Excavation Safety will be made at the contract lump sum price. Such payment shall be considered full compensation

for furnishing all labor, materials, tools, equipment, and incidentals for performing all the work. Progress payment for Temporary Shoring and Excavation Safety will be computed by the Engineer based on his estimate of the percentage completion of this item of work. In general, this will be proportional to the percentage completion of the major items of work.

1021 EROSION CONTROL MEASURES (HYDROSEEDING AND ROLLED EROSION CONTROL NETTING)

SCOPE

This work consists of seed bed preparation, fertilizing, seeding, mulching and installation of rolled erosion control netting (Type B) which shall be applied to areas indicated on the Plans and these Special Provisions.

MATERIALS

Hydroseeding will use a multispecies, locally appropriate native mix consistent with the species identified in Appendix X, including the following:

- Deerweed (*Acmispon glaber*)
- Western ragweed (*Ambrosia psilostachya*)
- Big sagebrush (*Artemisia tridentata*)
- Farewell-to-spring (*Clarkia purpurea*)
- California buckwheat (*Eriogonum fasciculatum*)
- Rubber rabbitbrush (*Ericameria nauseosa*)
- California poppy (*Eschscholzia californica*)
- Fescue (*Festuca microstachys*)
- Meadow barley (*Hordeum brachyantherum*)
- Goldfields (*Lasthenia californica*)
- Tidy tips (*Layia platyglossa*)
- Silver bush lupine (*Lupinus albifrons*)
- Bush monkeyflower (*Diplacus aurantiacus*)
- One-sided bluegrass (*Poa secunda*)
- Purple needlegrass (*Stipa pulchra*)

Seed shall be labeled and delivered in sealed standard containers with statement from the vendor certifying that each container of seed is in accordance with State Agricultural Code. Wet, moldy seed, and seed otherwise damaged in transit or storage shall not be accepted.

Rolled erosion control netting shall be Type B per Section 21-2.02O(3) "Netting" of the SSS.

CONSTRUCTION METHODS

The fertilizer may be applied in any way that will result in uniform distribution.

The fertilizer shall be incorporated into the soil. Incorporation may be as part of the seed bed preparation or as part of the seeding operation.

Hydroseeding work shall comply with Section 801-4.8.2 of the SSPWC and in accordance with the standards and practices of the industry. The mix will be applied in a two-step hydroseeding process using arbuscular mycorrhizal inoculum followed by cellulose mulch and tackifier. Final species proportions and pure live seed (PLS) rates will be refined to match site-specific big sagebrush scrub conditions and availability from native-seed suppliers within Ventura, Santa Barbara, or Kern counties. When applied the hydroseed shall be applied in a mixture/slurry consisting of water, seed, commercial fertilizers, fiber mulch, and tackifier. When hydraulically sprayed onto soil, it shall form a blotter-like material. Spray nozzle shall be directed so that hydroseeding penetrates soil surface to drill and mix the slurry components into the soil and maximum coverage by the hydroseed mixture.

A mulch covering shall be distributed uniformly over the surface of the seeded area. The mulch shall be applied by hand or other suitable equipment. The mulch shall be able to remain or be anchored in place.

The Engineer shall designate the extent of erosion control areas by directing the placement of stakes or other suitable markers. Remove and dispose of trash, debris and weeds in areas to receive erosion control materials. Remove and dispose of loose rocks larger than 2-1/2 inches in maximum dimension unless otherwise approved by the Engineer.

The Contractor shall protect the traveled way, drainage channels, and existing vegetation from overspray of hydraulically applied materials.

Do not apply hydraulically applied materials if:

1. Precipitation occurs
2. Water is standing on or moving across the soil surface.
3. Soil is frozen.
4. Air temperature is below 40 degrees F during the tackifier curing period unless allowed and authorized by tackifier manufacturer.

Before placing rolled erosion control netting, ensure the subgrade has been graded smoothly and there are no depressions or voids. Place netting within 24 hours after final preparation of the erosion control areas. Fasten netting to the surface with staples and anchors or as approved by the Engineer.

MEASUREMENT & PAYMENT

Payment of Hydroseeding (Erosion Control Measures) shall be made at the contract unit price per square foot placed. Such payment shall be considered full compensation for furnishing all labor, all materials including fertilizer and mulch, netting, equipment, tools, and incidentals necessary to complete the work.

1022 RIPRAP APRON

1022-1 SCOPE

Rip Rap Apron shall consist of rock rip rap with filter fabric and shall conform to the provisions in Section 200-1.6, "Stone for Riprap" of the SSPWC, as shown on the Plans, and these Special Provisions.

1022-2 MATERIALS

Filter fabric shall be 180 N, synthetic, non-woven, and per Section 213-5, "Geotextiles and Geogrids" of the SSPWC.

Riprap shall be Class IV per Section 200-1.6 of the SSPWC.

1022-3 CONSTRUCTION METHODS

The subgrade shall be prepared to the required lines and grades on the Plans or as directed by the Engineer. Any fill required in the subgrade shall be compacted to a density of 90% relative compaction.

Filter fabric shall be protected from punching, cutting, or tearing. Any damage other than an occasional small hole shall be repaired by placing another piece of cloth over the damaged part or by completely replacing the cloth. All overlaps, whether for repairs or for joining two pieces of cloth shall be a minimum of one foot.

Riprap apron shall be placed using mechanical equipment. It shall be constructed to the full course thickness in one operation and in such a manner as to avoid displacement of underlying materials. Riprap shall be delivered and placed in a manner that will ensure that it is reasonably homogenous with the smaller stones and spalls filling the voids between the larger stones. Riprap shall be placed in a manner to prevent damage to the filter fabric. Hand placement will be required to the extent necessary to prevent damage to the permanent works.

1022-4 MEASUREMENT & PAYMENT

Payment for Riprap Apron shall be made at the contract unit price per ton of rock placed. Such payment shall be considered full compensation for furnishing all labor, materials, equipment, tools and all incidentals necessary to complete the work including furnishing and installation of synthetic filter fabric and no additional payment will be made.