

PART V

TECHNICAL SPECIFICATIONS

**State Aid Project LPPSB1L-5 5278(021) South Center Street
Pedestrian Drainage Improvement Project**

**PART V
TECHNICAL SPECIFICATIONS**

SECTIONS:

V.1 MOBILIZATION

Mobilization shall conform to the provisions in Section 11, "Mobilization," of the Standard Specifications.

V.2 CONSTRUCTION AREA SIGNS

Construction area signs for temporary traffic control shall be furnished, installed, maintained, and removed when no longer required in conformance with the provisions in Section 12, "Construction Area Traffic Control Devices," of the Standard Specifications and these special provisions.

Attention is directed to "Furnish Sign" of these special provisions.

Attention is directed to the provisions in "Prequalified and Tested Signing and Delineation Materials" of these special provisions. Type II reflective sheeting shall not be used on construction area sign panels. Type III, IV, VII, VIII, or IX reflective sheeting shall be used for stationary mounted construction area sign panels.

Attention is directed to "Construction Project Information Signs" of these special provisions regarding the number and type of construction project information signs to be furnished, erected, maintained, and removed and disposed of.

Unless otherwise shown on the plans or specified in these special provisions, the color of construction area warning and guide signs shall have black legend and border on orange background, except W10-1 or W47 (CA) (Highway-Rail Grade Crossing Advance Warning) sign shall have black legend and border on yellow background.

Orange background on construction area signs shall be fluorescent orange.

Repair to construction area sign panels will not be allowed, except when approved by the Engineer. At nighttime under vehicular headlight illumination, sign panels that exhibit irregular luminance; shadowing or dark blotches shall be immediately replaced at the Contractor's expense.

The Contractor shall notify the appropriate regional notification center for operators of subsurface installations at least 2 working days, but not more than 14 calendar days, prior to commencing excavation for construction area sign posts. The regional notification centers include, but are not limited to, the following:

| Notification Center | Telephone Number |
|---|----------------------------------|
| Underground Service Alert-Northern California (USA) | (800) 642-2444 (800) 227-2600 |
| Underground Service Alert-Southern California (USA) | (800) 422-4133 |

Excavations required to install construction area signs shall be performed by hand methods without the use of power equipment, except that power equipment may be used if it is determined there are no utility facilities in the area of the proposed post holes. The post hole diameter, if backfilled with portland cement concrete, shall be at least 4 inches greater than the longer dimension of the post cross section.

Construction area signs placed within 15 feet from the edge of the travel way shall be mounted on stationary mounted sign supports as specified in "Construction Area Traffic Control Devices" of these special provisions.

The Contractor shall maintain accurate information on construction area signs. Signs that are no longer required shall be immediately covered or removed. Signs that convey inaccurate information shall be immediately replaced or the information shall be corrected. Covers shall be replaced when they no longer cover the signs properly. The Contractor shall immediately restore to the original position and location any sign that is displaced or overturned, from any cause, during the progress of work.

V.3 MAINTAINING TRAFFIC

Attention is directed to Section 7-1.08, "Public Convenience," Section 7-1.09, "Public Safety," and Section 12, "Construction Area Traffic Control Devices," of the Standard Specifications and to the provisions in "Public Safety" of these special provisions and these special provisions. Nothing in these special provisions shall be construed as relieving the Contractor from the responsibilities specified in Section 7-1.09, "Public Safety."

Lane closures shall conform to the provisions in section "Traffic Control System for Lane Closure" of these special provisions.

Whenever work vehicles or equipment are parked on the shoulder within 6 feet of a traffic lane, the shoulder area shall be closed with fluorescent orange traffic cones or portable delineators placed on a taper in advance of the parked vehicles or equipment and along the edge of the pavement at 25-foot intervals to a point not less than 25 feet past the last vehicle or piece of equipment. A minimum of 9 traffic cones or portable delineators shall be used for the taper. A W20-1 (ROAD WORK AHEAD) or W21-5b (RIGHT/LEFT SHOULDER CLOSED AHEAD) or C24(CA) (SHOULDER WORK AHEAD) sign shall be mounted on a portable sign stand with flags. The sign shall be placed where designated by the Engineer. The sign shall be a minimum of 48" x 48" in size. The Contractor shall immediately restore to the original position and location a traffic cone or delineator that is displaced or overturned, during the progress of work.

Except as otherwise provided, the full width of the traveled way shall be open for use by public traffic on Saturdays, Sundays and designated legal holidays; after 3:00 p.m. on Fridays and the day preceding designated legal holidays; and when construction operations are not actively in progress. On Saturdays, Sundays and designated legal holidays, ramps and one lane in each direction of travel on multilane roadways may be closed to public traffic for the sole purpose of maintaining the surface as required in Section 37-1.07, "Finishing," of the Standard Specifications. Lane closures on Saturdays, Sundays and designated legal holidays shall be restricted to daylight hours when public traffic will be least inconvenienced and delayed, as determined by the Engineer.

Designated legal holidays are: January 1st, the third Monday in February, the last Monday in May, July 4th, the first Monday in September, November 11th, Thanksgiving Day, and December 25th. When a designated legal holiday falls on a Sunday, the following Monday shall be a designated legal holiday. When November 11th falls on a Saturday, the preceding Friday shall be a designated legal holiday.

Minor deviations from the requirements of this section concerning hours of work which do not significantly change the cost of the work may be permitted upon the written request of the Contractor, if in the opinion of the Engineer, public traffic will be better served and the work expedited. These deviations shall not be adopted by the Contractor until the Engineer has approved the deviations in writing. Other modifications will be made by contract change order.

V.4 TRAFFIC CONTROL SYSTEM FOR LANE CLOSURE

A traffic control system shall consist of closing traffic lanes in conformance with the details shown on the plans, the provisions in Section 12, "Construction Area Traffic Control Devices," of the Standard Specifications, the provisions under "Maintaining Traffic" and "Construction Area Signs" of these special provisions, and these special provisions.

GENERAL

Whenever the work causes obliteration of pavement delineation, temporary or permanent pavement delineation shall be in place prior to opening the traveled way to public traffic. Lane line or centerline pavement delineation shall be provided at all times for traveled ways open to public traffic.

Work necessary, including required lines or marks, to establish the alignment of temporary pavement delineation shall be performed by the Contractor. Surfaces to receive temporary pavement delineation shall be dry and free of dirt and loose material. Temporary pavement delineation shall not be applied over existing pavement delineation or other temporary pavement delineation. Temporary pavement delineation shall be maintained until superseded or replaced with a new pattern of temporary pavement delineation or permanent pavement delineation.

Temporary pavement markers and removable traffic tape which conflicts with a new traffic pattern or which is applied to the final layer of surfacing or existing pavement to remain in place shall be removed when no longer required for the direction of public traffic, as determined by the Engineer.

TEMPORARY LANELINE AND CENTERLINE DELINEATION

Whenever lane lines and centerlines are obliterated, the minimum lane line and centerline delineation to be provided shall be temporary raised pavement markers placed at longitudinal intervals of not more than 24 feet. The temporary raised pavement markers shall be the same color as the lane line or centerline the markers replace. Temporary raised pavement markers shall be, at the option of the Contractor, one of the temporary pavement markers listed for short term day/night use (14 days or less) or long term day/night use (6 months or less) in "Prequalified and Tested Signing and Delineation Materials" of these special provisions.

Temporary raised pavement markers shall be placed in conformance with the manufacturer's instructions and shall be cemented to the surfacing with the adhesive

recommended by the manufacturer, except epoxy adhesive shall not be used to place pavement markers in areas where removal of the markers will be required.

Temporary lane line or centerline delineation consisting entirely of temporary raised pavement markers placed on longitudinal intervals of not more than 24 feet shall be used on lanes open to public traffic for a maximum of 14 days. Prior to the end of the 14 days, the permanent pavement delineation shall be placed. If the permanent pavement delineation is not placed within the 14 days, additional temporary pavement delineation shall be provided at the Contractor's expense. The additional temporary pavement delineation to be provided shall be equivalent to the pattern specified for the permanent pavement delineation for the area, as determined by the Engineer.

Full compensation for furnishing, placing, maintaining, and removing the temporary raised pavement markers used for temporary lane line and centerline delineation (including the signing specified for "no passing" zones) and for providing equivalent patterns of permanent traffic lines for these areas when required shall be considered as included in the contract prices paid for the items of work that obliterated the lane line and centerline pavement delineation and no separate payment will be made therefore.

The lateral offset for traffic cones, portable delineators or channelizes used for temporary edge line delineation shall be determined by the Engineer. If traffic cones or portable delineators are used as temporary pavement delineation for edge lines, the Contractor shall provide personnel to remain at the project site to maintain the cones or delineators during hours of the day that the cones or delineators are in use.

V. 5 ENGINEERING SURVEYING SITE EXAMINATION

General:

The Contractor shall be responsible for having ascertained pertinent local conditions such as location, accessibility and general character of the site and for having satisfied himself as to the conditions under which the work is to be performed. No claim for allowances because of his error or negligence in acquainting himself with the conditions at this site will be recognized.

The work shall consist of performing the construction layout and staking for the entire project, the work performed will include all staking for base material, pavement, striping, and replacing any monuments and ties removed or destroyed by the Contractor's operations. All will be approved by the representative of the City of Westmorland.

Measurement and Payment:

Payment shall be not be made separately, but shall be included in the cost of other items of work and shall include full compensation for all work performed in construction staking as well as replacement of monuments and ties, including recordation of new monuments and shall include all materials, equipment, labor and incidentals to complete the item of work in place.

V.6 EXISTING SURVEY MONUMENTS

Survey monuments shall be protected in place. Monument housing shall be raised to match the finish grade of pavement.

At the option of the contractor, survey monuments shall be re-established by Licensed Land Surveyors. Survey monuments shall be in conformance with the provisions in Section 81, "Monuments," of the Standard Specifications and these special provisions.

The cast steel and gray cast iron frames and covers, including hardware, shall conform to the provisions in Section 55-2, "Materials," of the Standard Specifications.

V.7 EXCAVATION

PCC removal, earthwork and grading shall conform to the provisions in Section 19, "Earthwork," of the Standard Specifications and these special provisions.

Contractor will remove; excavate to a depth of 12" the area marked out by surveyor.

Surplus excavated material shall become the property of the Contractor and shall be recycled and disposed of in conformance with the provisions in Section 7-1.13, "Disposal of Material outside the Highway Right of Way," of the Standard Specifications.

V.8 AGGREGATE BASE

Aggregate base shall be Class II, and shall conform to the provisions in Section 26, "Aggregate Bases," of the Standard Specifications and these special provisions.

The restriction that the amount of reclaimed material included in Class 2 aggregate base not exceed 50 percent of the total volume of the aggregate used shall not apply. Aggregate for Class 2 aggregate base may include reclaimed glass. Aggregate base incorporating reclaimed glass shall not be placed at locations where surfacing will not be placed over the aggregate base.

Payment

Payment for any aggregate base needed on the job will be included in the Lump Sum bid amount listed in the bid proposal and no other payment will be made therefor.

V.9 ASPHALT CONCRETE

Asphalt concrete shall be 3/8 inch Type A and shall conform to the provisions in Section 39, "Asphalt Concrete," of the Standard Specifications.

Payment

Payment for any asphaltic concrete needed on the job will be included in the Lump Sum bid amount listed in the bid proposal and no other payment will be made therefor.

V.10 MISCELLANEOUS CONCRETE CONSTRUCTION

Concrete for miscellaneous minor structures shall conform to the provisions in Section 73, "Concrete Curbs and Sidewalks," of the Standard Specifications and these special provisions.

PCC Concrete shall contain 6.5 sacks of cement per cubic yard, and obtain compressive strength of 4,500 PSI after 28 days of curing time, and shall contain 1 ½ lbs. polypropylene fiber per cubic yard. Polypropylene fiber by Fiber Mesh Co., Forta Mono, OAE.

Measurement and Payment

Work will include all labor, materials, equipment as needed to construct the item as shown on the plans and details.

Concrete work will be included in the bid contract lump sum price listed in the bid proposal (LS) and no other payment will be made.

V.11 DEMOLITION

Demolition shall consist of removal of existing PCC material (general demolition) and Includes saw cutting, excavation, and hauling of materials off-site for recycling before retention payment is made.

Measurement and Payment

Demolition will not be paid separately but will be included in the Lump Sum bid item as listed in the Bid Proposal and no other payment will be made therefor.