

SECTION 02705

PAVING AND RESURFACING

PART 1 - GENERAL

1.01 SUMMARY

- A. Section Includes: Furnishing all labor, material, equipment, tools and services required for the placing and compacting of asphalt concrete pavement and aggregate surfacing for roadways, parking lots and walkways to the lines, grades and dimensions shown on the Drawings and as specified herein. Also included is the repair and resurfacing of existing roadway and area paving damaged or removed during construction.

1.02 REFERENCE SPECIFICATIONS

- A. Whenever the words "Standard Specifications" are referred to, the reference is to the State of California, Department of Transportation, Standard Specifications.
- B. American Society for Testing and Materials (ASTM):
 - 1. D1556 Test Method for Density and Unit Weight of Soil in Place by the Sand-Cone Method
 - 2. D2922 Test Method for Density of Soil and Soil Aggregate in Place by Nuclear Method (Shallow Depth)

1.03 SUBMITTALS

- A. Submit in accordance with Section 01300.
- B. Submit the following under the Product Information category.
 - 1. Samples: Furnish, without additional cost to the Owner, such quantities of construction materials as may be required by the Engineer for test purposes. The Contractor shall cooperate with the Engineer and furnish necessary facilities for sampling and testing of all materials and workmanship. All materials furnished and all work performed shall be subject to rigid inspection, and no materials shall be used in the construction work until it has been inspected by the Engineer.
 - 2. Submit a signed verification from each source of supply for each construction material employed on this project indicating that the materials meet the Specification requirements.
 - 3. Mix design for asphalt concrete and test results of California Test 367.
 - 4. Submit manufacturer's certification of the actual volatile organic compounds (VOC) content for all pavement paints and bituminous pavement sealers proposed for use on this project. Submit certification of the actual VOC content for coatings manufactured after 1 September 1987. For coatings manufactured before 1 September 1987, submit VOC content and date of manufacture. VOC content shall be measured in

grams per liter by weight of coating as applied excluding water and color added to the tint base.

5. Submit verification that bituminous pavement sealers and paint products furnished meet applicable regulations as to allowable VOC content for the time and place of application and use intended.

1.04 QUALITY ASSURANCE

- A. Comply with Standard Specifications.

1.05 REGULATORY REQUIREMENTS

- A. All work, material, procedures and practices under this Section shall conform with requirements of the California Air Resources Board (CARB) and the Calaveras County Air Pollution Control District.

PART 2 - PRODUCTS

2.01 PAVING MATERIALS

- A. Aggregate Base: Standard Specifications, Section 26. Class and size as indicated on the Drawings; or if not indicated on the Drawings, use Class 2, 3/4-inch maximum.
- B. Tack Coat: Prime Coat and Paint Binder (Tack Coat) shall conform to Section 39-4.02.
- C. Asphalt Concrete: Asphalt Concrete shall be Dense Graded 1/2" Type B Asphalt Concrete conforming to Section 39 of Caltrans Standard Specifications (2006 Edition) in the following gradations varying with asphalt thickness:

1-1/4" to 3" max. lifts	1/2" maximum aggregate, medium graded
Less than 1-1/4"	3/8" maximum aggregate

1/2" maximum aggregate, medium graded asphalt concrete may be used for the first lift in structural section areas to be overlayed at the option of the Contractor.

2.02 NOT USED

2.03 NOT USED

PART 3 - EXECUTION

3.01 GENERAL

- A. This Specification shall cover newly surfaced areas as well as restoration of existing surfacing.
- B. Adjust existing and new manholes, meter boxes, cleanouts, etc. to match the new grade.

- C. Do not place new pavement until trenching is complete and backfilled.
- D. Restrict the use of heavy construction equipment and vehicles on new paving. Repair or replace, as directed by the Engineer, any damaged areas at no cost to the Owner.

3.02 PAVEMENT CUTTING

- A. After backfilling trenches and prior to paving, saw cut existing pavement parallel to the trench (using a concrete saw) to a minimum depth equal to or greater than one-half the thickness thereof. The pavement shall be cut back 6 inches on each side of the trench or excavation wall. Re-cut and restore any pavement damaged outside these lines at the expense of the Contractor. Should voids develop under the existing pavements during construction, those affected pavements shall be neatly saw cut in straight lines and replaced after the voids have been filled.

3.03 PLACEMENT OF AGGREGATE BASE

- A. Subgrade Preparation: Water or dry subgrade as required to bring the soil to within 2% of the optimum moisture content for proper compacting. Compact to a relative compaction of not less than 95%. When compaction of the subgrade areas on fill and embankments has been properly obtained, only such additional rolling will be required as necessary to obtain a thoroughly compacted subgrade immediately prior to placing the aggregate base thereon.
- B. Aggregate Base Tolerance: Do not place the aggregate base before the subgrade is approved by the Engineer. The finished aggregate base shall not vary more than 0.05 foot above, nor 0.10 foot below, the planned grade.
- C. Aggregate Base Placing: Spread the aggregate base material on the prepared subgrade by means of suitable spreading devices. The aggregate base material may be dumped in piles upon the subgrade and spread by bulldozing ahead from the dumped material. Each layer shall not exceed 0.50 feet. Segregation of large or fine particles of aggregate shall be avoided, and the material as spread shall be free from pockets of large and fine material.
- D. Compaction: Compact each layer of aggregate base material to not less than 95% relative compaction as determined by Test Method Calif. No. 216 or ASTM D1556 (Sand Cone), or Calif. No. 231 or ASTM D2922 (Nuclear method when approved by the Engineer). Compaction shall be in accordance with Section 26-1.05 of the Standard Specifications. Water aggregate base after compaction as provided in Section 17 of the Standard Specifications. Paragraph 17-1.04 is not applicable.

3.04 ASPHALT CONCRETE INSTALLATION

- A. Spread and compact asphalt concrete in accordance with Standard Specifications Section 39 to the thickness shown on the Drawings.

- B. Apply tack coat a rate of 0.05-gallon per square yard to all cold joints.
- C. Protect asphaltic concrete paving from damage until the surface has cooled sufficiently to permit traffic.
- D. Immediately remove spilled and splattered materials from adjacent surfaces.
- E. Asphalt Concrete shall be placed only when atmospheric temperature is above 50 degrees F and rising.

END OF SECTION