

SECTION 32 12 16 - ASPHALT PAVING

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Aggregate base course.
- B. Single course bituminous concrete paving.
- C. Double course bituminous concrete paving.
- D. Surface sealer.

1.02 RELATED REQUIREMENTS

- A. Section 31 22 00 - Grading: Preparation of site for paving .
- B. Section 32 11 23 - Aggregate Base Courses: Aggregate base course.
- C. Section 32 13 13 - Concrete Paving: Concrete curbs.
- D. Section 32 17 13 - Parking Bumpers: Concrete bumpers.
- E. Section 33 05 13 - Manholes and Structures: Manholes, including frames; gutter drainage grilles, covers, and frames for placement by this section.

1.03 REFERENCE STANDARDS

- A. ASTM D946 - Standard Specification for Penetration-Graded Asphalt Cement for Use in Pavement Construction; 2009a.

1.04 QUALITY ASSURANCE

- A. Perform Work in accordance with State of Virginia Highways standard.
- B. Mixing Plant: Conform to State of Virginia Highways standard.
- C. Obtain materials from same source throughout.

1.05 REGULATORY REQUIREMENTS

- A. Conform to applicable code for paving work on public property.

1.06 FIELD CONDITIONS

- A. Do not place asphalt when ambient air or base surface temperature is less than 40 degrees F, or surface is wet or frozen.
- B. Place bitumen mixture when temperature is not more than 15 F degrees below bitumen supplier's bill of lading and not more than maximum specified temperature.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Asphalt Cement: In accordance with State of Virginia Highways standards.
- B. Aggregate for Base Course: In accordance with State of Virginia Highways standards.
- C. Aggregate for Binder Course: In accordance with State of Virginia Highways standards.
- D. Aggregate for Wearing Course: In accordance with State of Virginia Highways standards.
- E. Fine Aggregate: In accordance with State of Virginia Highways standards.
- F. Mineral Filler: Finely ground particles of limestone, hydrated lime or other mineral dust, free of foreign matter.
- G. Primer: In accordance with State of Virginia Highways standards.
- H. Tack Coat: In accordance with State of Virginia Highways standards.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that compacted subgrade is dry and ready to support paving and imposed loads.
- B. Verify gradients and elevations of base are correct.

3.02 BASE COURSE

- A. See Section 32 11 23.

3.03 PREPARATION - PRIMER

- A. Apply primer in accordance with State of Virginia Highways standards.
- B. Apply primer on aggregate base or subbase at uniform rate of 1/3 gal/sq yd.
- C. Apply primer to contact surfaces of curbs, gutters, and walks.
- D. Use clean sand to blot excess primer.

3.04 PREPARATION - TACK COAT

- A. Apply tack coat in accordance with State of Virginia Highways standards.
- B. Apply tack coat on asphalt or concrete surfaces over subgrade surface at uniform rate of 1/3 gal/sq yd.
- C. Apply tack coat to contact surfaces of curbs, gutters and walks.
- D. Coat surfaces of manhole frames with oil to prevent bond with asphalt pavement. Do not tack coat these surfaces.

3.05 PLACING ASPHALT PAVEMENT - SINGLE COURSE

- A. Install Work in accordance with State of Virginia Highways standards.
- B. Place asphalt within 24 hours of applying primer or tack coat.
- C. Place to thickness identified in pavement sections shown on plans.
- D. Install drainage inlet frames and manhole frames in correct position and elevation.
- E. Compact pavement by rolling to specified density. Do not displace or extrude pavement from position. Hand compact in areas inaccessible to rolling equipment.
- F. Perform rolling with consecutive passes to achieve even and smooth finish without roller marks.

3.06 PLACING ASPHALT PAVEMENT - DOUBLE COURSE

- A. Place asphalt binder course within 24 hours of applying primer coat.
- B. Place binder course to thickness identified in pavement sections shown on plans.
- C. Place wearing course within 24 hours of applying tack coat on binder course.
- D. Place wearing course to thickness identified in pavement sections shown on plans.
- E. Install drainage inlet frames and manhole frames in correct position and elevation.
- F. Compact pavement by rolling to specified density. Do not displace or extrude pavement from position. Hand compact in areas inaccessible to rolling equipment.
- G. Perform rolling with consecutive passes to achieve even and smooth finish, without roller marks.

3.07 CURBS

- A. Install extruded asphalt curbs of design profile as indicated.

3.08 TOLERANCES

- A. Flatness: Maximum variation of 1/4 inch measured with 10 foot straight edge.
- B. Compacted Thickness: Within 1/4 inch of specified or indicated thickness.
- C. Variation from True Elevation: Within 1/4 inch.

3.09 FIELD QUALITY CONTROL

- A. See Section 01 40 00 - Quality Requirements, for general requirements for quality control.
- B. Provide field inspection and testing. Take samples and perform tests in accordance with State of Virginia Highways Standards.

3.10 PROTECTION

- A. Immediately after placement, protect pavement from mechanical injury for 2 days or until surface temperature is less than 100 degrees F.

END OF SECTION