

STANDARD SPECIFICATIONS
SECTION 02950
PAVEMENT REQUIREMENTS

PART 1 GENERAL

1.1 DESCRIPTION

- A. Section includes requirements for removing, replacing and providing new paving for roads, driveways, parking areas, curb and gutter, walks, and paved areas within limits indicated, including subgrade and base courses.

1.2 DEFINITIONS

- A. Paved: Covered with gravel, stone, brick, asphalt, concrete, or other material providing a firm, level, or convenient surface for vehicular or pedestrian traffic.

1.3 JURISDICTIONAL REQUIREMENTS

- A. Commission utility contracts involve work in roads, parking and paved areas under following jurisdictions:
 - 1. MSHA.
 - 2. Montgomery County Department of Permitting Services.
 - 3. Prince George's County Public Works and Transportation Department.
 - 4. Incorporated municipalities.
 - 5. Other jurisdictions.
- B. When working in these areas, remove and replace roads, driveways, parking areas, curb and gutter, walks, and other paved areas following specific jurisdiction's requirements.

1.4 PAVEMENT REPLACEMENT

- A. Service Connection Contracts (AC, LC, and SC).
 - 1. Temporary pavement only.

PART 2 PRODUCTS

2.1 MATERIAL

- A. Commission Furnished Materials.
 - 1. Pavement Repair Identification Markers.
- B. Concrete.
 - 1. Meet requirements in Section 03300, except where jurisdictional requirements apply.

C. Other Materials.

1. Materials for permanent pavement replacement: Meet latest editions of following jurisdictional requirements:
 - a. State Roads: MSHA Standard Specifications, Standard Details, and Master Permits.
 - b. Montgomery County Roads: Montgomery County Department of Permitting Services, Specifications for Utility Construction Permit.
 - c. Prince George's County Roads: Prince George's County Public Works and Transportation Department Specifications and Standard Details.
 - d. Areas not covered above: Follow Right of Way Construction Permit and Special Conditions.

D. Temporary Pavement Replacement:

1. Hot Mix Asphalt Surface-Fine (SF): Follow MSHA Standard Specifications.
 - a. When not available, use Engineer approved high performance cold mix asphalt.
2. High Performance Cold Mix Asphalt: Composed of approved suitable aggregate, plant mixed with approved asphaltic liquid blend following blend manufacturer's specifications.
 - a. Final mix:
 - 1) Stripping resistance of retained coating minimum 75% when testing to ASTM-D-1664, latest revision.
 - 2) Remain flexible and cohesive to minus fifteen degrees F (-26 degrees C).
 - 3) Homogeneous, free of lumps.
 - 4) Retain its adhesive qualities in wet applications.
 - 5) Approved High Performance Cold Mix Products:
 - a) National Paving and Contracting, Perma-Patch
 - b) Seaboard Asphalt Product, Bond-X
 - c) Lafarge North America, QPR
 - b. Acceptable aggregate: Consist of 10% crushed stone or laboratory approved equivalent under ASTM C-136.

Recommended Gradation:

Sieve Size	Percent Passing by Weight
3/8"	90-100%
#4	20-55%
#8	5-30%
#16	0-10%
#50	0-5%
#200	0-2%

- c. Acceptable Liquid Asphaltic Blends:
 - 1) National Paving and Contracting, Co., Perma-Patch Liquid
 - 2) Sylvax Corp., UPM Liquid Asphalt Blend
 - 3) Lafarge North America, QPR Blend
 - 4) Sylcrete Corp., Sylcrete-EV
 - 5) Co-Products Corp., I.A.R.

6) Seaboard Asphalt Product, Bond-X

PART 3 EXECUTION

3.1 PUBLIC NOTIFICATION

- A. Deliver written notices to all homes and businesses 48 hours prior to commencement of work being conducted, including a local telephone number for inquiries.
- B. Provide owner or occupant a summary of work to be completed, and time and duration of paving operations.
- C. Contact any home or business where ingress and egress will be unavailable to property within time stated in written notice.
- D. Fax or email copies of all delivered notices to Engineer.

3.2 GENERAL

- A. Construction requiring removal and replacement of roads, driveways, parking areas, curb and gutter, walks and paved areas, and new paving: Meet latest editions of jurisdictional requirements listed above in PART 2.

3.3 REMOVAL OF EXISTING PAVEMENT

- A. Cut and remove existing pavement in advance of excavating to neat lines following appropriate jurisdictional standard detail utilizing the Commission standard trench widths.
- B. Saw cut existing concrete pavement and concrete base course full depth and remove load transfer devices where they exist.
- C. Provide temporary walkways and curb and gutter at Engineer's direction.

3.4 USE OF STEEL PLATING

- A. Whenever Steel plating is required or used during construction within paved roadway:
 - 1. Notify Engineer at least 48 hours in advance of placing steel plates in roadway.
 - 2. Follow jurisdictional requirements and as specified herein.
 - 3. Dimensions: At least 1 inch thick and large enough to allow minimum of 1 foot of bearing on 3 sides of excavation.
 - 4. Placement: Pin plates to prevent movement. Recess plates at Engineer's direction.
 - 5. Taper cold mix asphalt on all edges of steel plate from height of steel plate extending minimum of 1 foot to existing road surface.

6. During months when snowfall may be expected, mark steel plates with 2 inch square stake painted International Orange and extending at least 4 feet above ground, placed adjacent to edge of roadway.
7. If jurisdictional or Commission forces must correct emergency condition due to excavation and plate placement, Contractor will be charged for cost of corrective measures required.
8. Unless otherwise approved by Engineer, remove steel plates in not more than 7 days.

3.5 PREPARATION FOR PAVEMENT REPLACEMENT

- A. Compact Trench Backfill following Section 02315.
- B. Provide temporary or permanent pavement immediately upon completion of backfill.

3.6 TEMPORARY PAVEMENT

- A. Place temporary pavement as specified herein except where otherwise required by jurisdictional requirements.
 1. Place and compact hot mix asphalt bituminous concrete mix minimum thickness of 3 inches and at same grade as surrounding surface on Trench Backfills required in Section 02315 for Type I areas under existing paving.
 2. When approved by Engineer for use, place and compact high performance cold mix asphalt minimum thickness of 3 inches and at same grade as surrounding surface on Trench Backfills required in Section 02315 for Type I areas under existing paving.
 - a. Stockpiling of high performance cold mix asphalt will be permitted provided it is stored in manner to prevent infiltration of deleterious material and not longer than 1 month from date of mixing.
 - b. Compact high performance cold mix asphalt using uniform tamping equipment.
 3. Provide hot mix asphalt for temporary curb and gutter, walks, and driveways.
 4. Mark temporary pavement repairs in all roads with blue paint for water or water and sewer, and green paint for sewer in 4 inch high letters to read WSSC-S for Systems Construction or WSSC-F for Facilities Construction.
 5. Temporary pavement: Remain in place maximum of 60 days, unless jurisdictional requirements are more stringent.
 - a. If approved suppliers of permanent paving are unavailable due to wintertime shutdown, allotted time period will be extended to include shutdown period.
 6. Maintain temporary pavement in condition acceptable to Engineer until permanent pavement is placed.
 7. If temporary pavement becomes defective and creates an emergency, commence repair to rectify situation within 1 hour after notification by Engineer or Engineer may arrange to have Work performed by others and deduct costs thereof from monies owed Contractor.

3.7 PERMANENT PAVEMENT

- A. Dimensions: Follow jurisdictional requirements.
 - 1. If pavement has been undermined, damaged, or disturbed by Contractor's operations, increase extent of repaving so that new pavement and base extends at least 18 inches over undisturbed soil.
 - 2. Install pavement repair identification markers in each repair and every 50 feet in longitudinal repairs.

- B. Bituminous Concrete Overlay:
 - 1. Place bituminous concrete overlay to limits and depth specified in Drawings, trench details and Right of Way Construction Permit.
 - 2. Pavement replacement for trenches to be overlaid: Follow standard jurisdictional requirements or as specified below.

- C. Milling and Bituminous Concrete Overlay:
 - 1. Mill and place bituminous concrete overlay to limits and depth specified following jurisdictional requirements.
 - 2. Pavement replacement for trenches to be overlaid: Follow standard jurisdictional requirements or as specified below.

- D. Bituminous Concrete Pavement Replacement:
 - 1. Prime coat cut surfaces to receive asphalt patch and between each new layer of asphalt.
 - a. Clean surface of loose and foreign materials.
 - b. Apply under pressure: Uniformly, at rate of 0.01 to 0.05 gallons per square yard of area.
 - 2. Bituminous Concrete: Follow jurisdictional requirements.

- E. Concrete Pavement Replacement:
 - 1. Replace load transfer devices where removed.
 - 2. Place concrete pavement following jurisdictional requirements.
 - 3. Place expansion joints at 40 feet on center, maximum, or space to match existing joints, whichever is less.

- F. Shoulder Replacement:
 - 1. Replace disturbed shoulder areas with type of material existing before disturbance, following appropriate jurisdictional requirements.
 - 2. Reuse of gravel or aggregate material may be permitted with Engineer's approval, provided gravel or aggregate is removed and stockpiled separately, and is not infiltrated with foreign material.

- G. Curb and Gutter Replacement:
 - 1. Do not tunnel concrete and asphalt curbs without Engineer's approval.
 - 2. Replace curb and gutter following jurisdictional requirements.

3. When curb replacement is required within 4 feet of construction joint, extend replacement to joint.

H. Walk Replacement:

1. Remove and replace entire walk square affected.
2. Space joints to match existing surrounding walk.

I. Driveway and Other Replacement:

1. Driveways in State or County Rights-of-way: Replace following applicable jurisdictional requirements.
2. Unless otherwise shown on Drawings, replace driveways at other locations and other paved areas in kind.

PART 4 MEASUREMENT AND PAYMENT

4.1 ROADWAY PAVEMENT REPLACEMENT

- A. Measurement: By square yard following Commission standard trench widths measured horizontally along trench centerline.
- B. Payment: At unit price listed in Bid Schedule.
 1. Payment includes excavation and disposal of existing and temporary pavement.

4.2 BITUMINOUS CONCRETE OVERLAY

- A. Measurement: By square yard.
- B. Payment: At unit price for each square yard listed in Bid Schedule.
 1. Payment includes labor, material, and equipment to provide bituminous concrete overlay specified herein.

4.3 MILLING AND BITUMINOUS CONCRETE OVERLAY

- A. Measurement: By square yard.
- B. Payment: At unit price for each square yard listed in Bid Schedule.
 1. Payment includes labor, material, and equipment to provide milling and bituminous concrete overlay specified herein.

4.4 TEMPORARY HOT BITUMINOUS CONCRETE TO REPLACE COLD PATCH IN MARYLAND STATE HIGHWAY ADMINISTRATION ROADWAYS

- A. Measurement: By square yard following Commission standard trench widths measured horizontally along trench centerline.

- B. Payment: At fixed contingent unit price for each square yard listed in Bid Schedule.
1. Payment includes removal of temporary cold mix, labor, material and equipment to provide hot bituminous concrete patch as specified herein.

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