

SECTION 2.3 - SURFACE RESTORATION

2.03.01 GENERAL

- A. The Contractor shall restore all surfaces damaged by his operations to the widths and extent detailed in the Appendix or specified herein.
- B. Surface restoration in streets and roads maintained by the Maryland State Highway Administration shall be accomplished in accordance with applicable utility construction permits.
- C. Materials and construction methods shall be in accordance with these specifications and the Maryland Department of Transportation Standard Specifications for Construction & Materials dated 2001 and all subsequent amendments.
- D. Existing pavement to be trimmed to secure a straight clean edge for repaving. Saw cut bituminous pavement as shown on the drawings and as directed to obtain a clean pavement edge.
- E. Surface course and concrete sections shall be saw cut and removed, not broken out.
- F. No staggered or irregular longitudinal trench repair widths shall be allowed in each block of work. Repairs shall be of a uniform width and in a straight line.
- G. Minimum pavement restoration width shall be fifteen feet (15') on either side of pavement disturbance. Pavement restoration width shall be as shown in the details unless otherwise approved in writing by the Engineer. Should the Contractor damage or disturb larger areas without being authorized to do so by the Engineer, he shall replace the additional area.
- H. Undermined areas shall be grout filled or cut back.
- I. All necessary adjustments to existing utilities shall be made prior to paving operations and shall be repeated if there is any damage due to rolling and compacting operations.
- J. Manhole or catch basin adjustments can be made with manhole adjustment rings, brick courses or mortar layers. Valve boxes shall be screw adjusted.
- K. Catch basins, inlets, curbs and all other appurtenances shall be adequately covered and protected prior to application of bituminous materials. No earth or bituminous materials shall be allowed to enter any storm drainage system, and suitable containment provisions shall be employed to prevent surface runoff of bituminous materials.
- L. All trenches within paved areas shall be cut back by one (1') foot on either side as shown in the standard details.

- M. Skewed patches will not be permitted; the patches shall be boxed square or rectangular.
- N. The final surface shall match grades existing prior to construction and shall be such that a smooth transition free of abrupt changes in grade is made with adjacent pavements and/pr sidewalks. No depressions or other misalignment shall obstruct, trap or otherwise misdirect the flow of surface water drainage.
- O. Where longitudinal trenches are installed within the roadway, the entire lane disturbed shall be milled 1½” for the effected area and overlay with 9.5mm Superpave surface course 1 ½” thick after compaction. The lane restorations shall be milled and an overlay placed from the Limit of Disturbance to the Limit of Disturbance.**
- P. Where horizontal trenches or multiple cross trenches are installed in a roadway, the entire road width shall be milled 1½” for the effected area , fifteen feet (15’) on either side of the disturbance, and an overlay placed with 9.5mm Superpave surface course 1 ½” thick after compaction. If multiple trenches are made within fifty feet (50’) of one another the area between the trenches shall also be milled 1 ½” and a 9.5 mm Superpave overlay placed to a 1 ½” compacted thickness.**
- Q. Paving operations can be performed with the following minimum temperatures:
 - 1. 32 degrees for Super-Pave base courses.
 - 2. 40 degrees for Super-Pave surface course.

Lift thickness shall be limited to:

- 1. 2" for 9.5mm Super-Pave surface course.
- 2. 3" for 19mm Super-Pave base courses.
- 3. 4” for Graded Aggregate.
- 4. 8" for backfill.

2.03.02 TEMPORARY REPAVING IN PUBLIC STREETS

- A. Where weather conditions preclude trench pavement repair, the Contractor shall furnish, place and compact 2 inches of cold patch as temporary pavement surface over all backfill areas created for pipeline and structure installation located in roadways. This surface shall be maintained by the contractor until permanent surface restoration has been performed.
- B. Should the contractor remove existing pavement beyond the width specified or detailed on the plans, or should pavement be disturbed from settlement, slides or other construction activities, he shall saw cut back the pavement and provide temporary paving in these areas.
- C. On State highways and all other areas over which the Maryland Department of Transportation exercises jurisdiction, all pavement restoration shall be done in accordance with the permit requirements of the State Highway Administration.

- D. A six (6) inch layer of crusher run shall be placed at the end of every workday on all utility trenched in areas not subject to complete street repavement such as gravel parking lots, drives, crusher run alleys and walkways.
- E. Metal laying may be used at the end point of the utility laying operation and must be used to protect the integrity of concrete patches.

2.03.03 MAINTENANCE OF REFILLED EXCAVATIONS

- A. The Contractor shall maintain, at his own expense, all refilled excavations and surfacing in proper condition as specified herein. All depressions appearing in the refilled excavation, stabilized base and temporary paving shall be properly refilled. If the Contractor fails to make repairs within 48 hours after receipt of written notice from the Engineer, the Town may refill said depressions and the cost thereof shall be billed to the Contractor. In case of emergency, the Town may refill any depression or protect with barricades without giving previous notice to the Contractor, and the cost of so doing shall be billed to the Contractor.
- B. The Contractor shall be responsible for any injury or damage that may result from lack of maintenance of any refilled excavation at any time.

2.03.04 BASE COURSES

- A. Graded Aggregate
 - A. Graded aggregate base course shall be spread on prepared and compacted refilled excavation to the compacted depth shown on the drawing details.
 - B. Materials and methods on construction shall meet the provisions of Section 501 of referenced standard specifications.
- B. Bituminous Concrete Base Course (Deep lift)
 - 1. Bituminous concrete base course shall be spread on prepared and compacted refilled excavations to the compacted depth shown on the details.
 - 2. Materials and methods of construction shall meet the provisions of MD-SHA Standards.

2.03.05 BITUMINOUS SURFACE TREATMENT

- A. Bituminous surface treatment shall consist of a number of courses of bituminous material and aggregate as shown on the driveway detail.
- B. Materials and methods of construction shall meet the provisions of MD-SHA Standards.

2.03.06 BITUMINOUS CONCRETE PAVEMENT

- A. Hot mix, hot laid bituminous concrete, Super-pave, shall consist of placing bituminous concrete base and or wearing courses on a prepared sub-base to the minimum compacted thickness shown on the standard details.
- B. Materials and methods of construction shall meet the provisions of Section 504 of the referenced standard specification. All thicknesses detailed shall be compacted thicknesses.
- C. Bituminous Concrete Driveways
 - a. Saw cut existing driveways if sections are acceptable for re-use. Prior to replacement of driveways, the Contractor, Engineer and Town shall review field conditions. The Town will designate the extent of additional removal and replacement. Upon completion of utility construction, the Contractor shall reconstruct private driveways as specified.
 - b. Bituminous driveways and parking areas disturbed through the Contractor's construction operations shall be restored by a minimum of 3-inches of hot mix bituminous concrete pavement placed in a single lift onto a base course consisting of 4-inches of properly prepared and compacted crushed stone or quarry waste. Commercial and residential entrances on State maintained streets shall be in accordance with the plan details. Match existing thickness where condition exceeds minimum restoration.
 - c. The hot-mix bituminous concrete surface shall conform to the Maryland SHA requirements and shall be constructed in accordance with the applicable Articles of the specifications.
 - d. The subgrade shall be properly prepared, graded and compacted in accordance with Section 2A of these Standards.

2.03.07 CONCRETE PAVEMENT

- A. Concrete used in the restoration of street and roads shall be placed to the minimum thickness as approved by the Town Engineer. Concrete may be a base course with a bituminous concrete overlay or a finished surface course if the layers are separated by a layer of aggregate.
- B. All concrete shall be according to Maryland Standard Specifications Section 902.

2.03.08 TOPSOIL AND SEEDING

- A. Topsoil shall be placed in areas where grass has been disturbed by the Contractor's operations. Depth of topsoil shall be four inches (4") minimum. Topsoil salvages and stockpiled during trench and structure excavation may be used for this purpose. When topsoiling, all materials and methods of construction shall meet the provisions of MD-SHA Standards. If directed, the Contractor shall have the topsoil tested by a State certified

laboratory and shall submit certification that topsoil meets the specified standard. Topsoil shall be clean, free of roots, stones, and other debris.

- B. Seeding shall consist of furnishing and placing seed and soil supplements on topsoiled areas and at any other location, as directed by the Engineer. When seeding, all materials and methods of construction shall meet the provisions of MD-SHA Standards.
- C. Fertilizer shall be a recognized commercial fertilizer containing a minimum of five percent (5%) nitrogen, ten percent (10%) available phosphoric acid and ten percent (10%) soluble potash by weight. It shall be applied in sufficient amounts to provide sixty (60) pounds of nitrogen per acre.
- D. Fertilizing and seeding application dates shall be in conformance with the Talbot County Soil Conservation District. Seed shall be applied at a rate of four (4) to five (5) pounds per 1,000 square feet.
- E. No mulch shall be required unless the area to be seeded rests upon a slope greater than 3 to 1. Mulch for these areas shall consist of straw mulch as specified in MD-SHA Standards, Section.

2.03.09 BRICK SIDEWALK PAVERS

- A. Brick sidewalk products and laying patterns vary throughout the Town. Plans presented for review shall define the designer's intentions utilizing a pre-approved product and pattern appropriate to the work area. The final decision on the material and pattern will be at the discretion of the Town Engineer to match the existing site characteristics. To accommodate the Department of Justice's Americans with Disabilities Act requirements all new walks shall utilize 4"x8"x2 1/4" "Paving Brick" sizes to match existing elevations.
- B. Downtown areas shall utilize Glenn Gary Molded Model 26HB or Pine Hall wire cut "Pathway Full Range" brick. Glenn Gary 26HB brick may be laid in running bond only. More decorative areas and area subject to significant vehicular loadings shall utilize the Pine Hall Product or equal with compressive strength of 12,000 psf or greater. All areas subject to vehicular loading, including but not limited to handicap ramps, driveway entrances, median ramps, etc... shall have a reinforced concrete subbase as specified in the cast in place concrete section and as detailed in PW – 3.01.
- C. Handicap ramps shall utilize truncated dome brick products as required by the Department of Justice's Americans with Disabilities Act requirements. Truncated domes shall be as manufactured by Pine Hall, color "Buff"

END OF SECTION