CHAPTER 4 ROADWAY REPAIR AND RESURFACING

4.1 AGGREGATE SURFACING:
This section covers gravel or crushed stone surfacing for roads, drives and parking areas as shown on the plans and as specified herein.

A. Materials:
   1. Drainage Structures and Pipe Material shall conform to requirements shown on the plans, and shall be as specified in other sections.
   2. Surfacing shall consist of crushed stone or gravel free from soft pieces, disintegrated particles and organic matter. The material shall conform to the requirements of the SCDOT, and shall be graded as follows:
      
      | Percent by Sieve Size | Weight Passing |
      |------------------------|---------------|
      | 2 in.                  | 100           |
      | 1-1/2 in.              | 95-100        |
      | 1 in.                  | 70-100        |
      | ½ in.                  | 50-80         |
      | No. 4                  | 30-55         |
      | No. 30                 | 12-31         |
      | No. 200                | 6-15          |

B. Construction: Surfacing shall be graded to subgrade and compacted as specified in Chapter 2, “Earthwork”. Surfacing shall be finished by fine grading to the required lines, grades and sections, and by recompacting the subgrade with heavy rollers. Surfacing shall be graded to drainage structures.
   1. Drainage Structures and Pipe shall be properly installed at the locations shown on the plans.
   2. Surfacing shall be installed in accordance with all applicable provisions of SCDOT Standard Specifications. Surfacing shall be placed to a compacted thickness of 6 inches, unless otherwise noted.

C. Completion: Surfacing shall be fully completed, dressed off, and left in good condition at completion of the work.

4.2 CUTTING AND REPLACING PAVEMENT:
This section covers cutting and replacing pavement for installation of utilities, and resurfacing of existing pavement as shown on the plans and as specified herein. Existing pavement to be cut for installation of pipe or other utilities shall be replaced with pavement as specified below. Encroachment permit with stricter requirements takes precedence.

A. Cutting Pavement: Pavement (concrete or asphalt) shall be cut 12 inches wider than the excavated area on each side after trench is backfilled. Cuts shall be either parallel or perpendicular to the road centerline. Ragged and irregular edges shall be redone. Concrete pavement shall be sawed with suitable concrete saw cutting equipment.

B. Pavement Replacement:
   a) Pavement shall be replaced with bituminous plant mix a minimum of 2” thick, except that existing concrete pavement shall be replaced with 8 inches minimum of
Portland cement ready mix 4,000 psi concrete. Pavement shall conform to the applicable SCDOT specifications for each type.

b) Pavement shall be repaired within the same week that it is cut. If inclement weather delays pavement replacement, CONTRACTOR shall not cut additional pavement until he has notified the ENGINEER and received specific permission to proceed.

c) Asphalt pavement:
   i) The entire area to be resurfaced (including edges of existing pavement) shall be tack primed with an acceptable asphalt tack coat just prior to placing the new pavement.
   ii) A 1.5” overlay is to extend 5’ beyond the trim limit over perpendicular cuts to roads and driveways.
   iii) New pavement surfaces shall be smooth, true to grade and shall provide a smooth transition with existing surfaces. All settlement and/or damage occurring during construction and the warranty period shall be repaired by the CONTRACTOR.

2. All Work on State Highways shall be done in strict accordance with State Department of Transportation requirements. CONTRACTOR shall familiarize himself with all such requirements. He shall obtain from the OWNER a copy of all required encroachment permits, and shall conform to all requirements and stipulations therein. In case of conflict between the plans and encroachment permits, the encroachment permits will govern if stricter.

4.3 RESURFACING OF EXISTING PAVEMENT:

Work consists of the resurfacing of existing pavement as indicated on the plans and as specified herein. Unless otherwise specified, all work shall be in accordance with applicable state department of transportation specifications.

A. General: Proper surface drainage shall be maintained at all times, especially at private driveways. Concrete curbs and other items, where damaged, shall be repaired to the satisfaction of the ENGINEER and to match existing. Manhole covers and valve boxes shall be raised as required to final surface. All potholes and other large depressions shall be filled to the satisfaction of the ENGINEER.

B. Preparation: Existing pavement shall be thoroughly swept and scraped clean, free from dust and foreign material, and so maintained until the bituminous mixture is laid.

C. Leveling Course: Where the surface of existing pavement is irregular, it shall be brought to uniform contour by leveling with a bituminous mixture. The leveling course shall be thoroughly compacted until it conforms with the surrounding surface.

D. Tack Coat: A tack Coat shall be applied to existing pavement and to the leveling course before the surface course is laid. Tack coat shall be asphalt cement, emulsified asphalt, or rapid curing type cutback asphalt. Contact surfaces of curbs, manholes and other items shall be painted with asphalt cement before the bituminous mixture is placed against them.

E. Surface Course: Surface Course shall be hot laid Type 1 asphalt placed over the leveling course to a compacted thickness of 1-1/2 inch. After compaction, the pavement surface shall be smooth and true to the established crown and grade. Defects shall be neatly cut out and replaced to the satisfaction of the ENGINEER. Sections of new pavement shall be protected from traffic until they have properly hardened. All settlement and damage shall be repaired by the CONTRACTOR.

F. Warranty Period: The warranty period on all pavement work shall be 2 years. The
warranty period starts upon acceptance by the governing body or final acceptance by BJWSA, if not under the jurisdiction of a governing body.

END OF SECTION