

## **SECTION 317**

### **PAVEMENT PATCHING**

#### **I. GENERAL**

##### **1.1. DESCRIPTION OF WORK**

The Contractor shall furnish all labor, materials, equipment and supplies, and shall perform all Work necessary for the replacement of asphalt-paved surfaces over utility trenches as shown in the Contract Documents and specified herein.

##### **1.2. MATERIALS**

- A. Materials for pavement patching shall be furnished by the Contractor in accordance with Section 200. Aggregate base, tack coat, surface and base asphalt concrete materials and method of installation shall be in accordance with Sections 200, 309, 313, and 315 of these Specifications.
- B. Equipment and placing limitations shall be in accordance with Sections 315.

##### **1.3. SUBMITTALS**

Submittals shall be those listed in Section 200.

#### **II. EXECUTION**

##### **2.1. GENERAL**

- A. Paved surfaces necessary to be removed or disturbed in order to perform the installation of water, sewer and storm pipelines and private utilities shall be restored in accordance with the requirements specified herein or shown in the Contract Documents.
- B. Compaction of the subgrade and placement of pavement shall be performed in a manner as to prevent settlement of restored surfaces. Irregularities, which develop in the restored pavement section as a result of improper placement or compaction, shall be corrected by the Contractor at no additional expense to the Owner.
- C. Any pavement undermined or otherwise disturbed shall be edged with a method acceptable to the Owner or sawed as straight as possible and removed so the patched pavement will be restored to a uniform surface conforming to the grade and section existing prior to commencement of Work without ragged edges, spalls or loose material. A backhoe cut will be acceptable if the entire roadway is to receive an overlay. If there has been settlement of the edge of pavement at the cut, the settled portion shall not be corrected by an overlap. The edges of the existing pavement shall receive a tack coat per Section 310 before new asphalt is placed.
- D. When in the opinion of the Owner the Work is detrimental to the comfort and safety of the citizens and the Contractor fails to provide an immediate correction, the Owner will order that the necessary repairs be made at the expense of the Contractor.

E. Construction methods shall conform to the requirements listed herein and Sections 305, 309, 310, 313, 315, and 515 of these Specifications.

## 2.2. PROCEDURE

A. All excavated paved areas shall be backfilled and compacted at the end of each day prior to opening to vehicular traffic. Backfill shall be in accordance with the appropriate pavement patch section indicated in the Contract Documents except that aggregate material shall be applied up to the surface of the roadway. This Work shall occur prior to the completion of Work on any day unless otherwise approved by the Owner. At the end of each work week, but no more than 6 Days after backfilling, aggregate material shall be removed to the depth shown on the pavement patch section, the in-situ aggregate shall be recompacted, and the trench patched with asphalt concrete or cold mix.

B. The base and sub-base materials must provide a smooth and uniform surface. Thickness of the base course shall be at the Contractor's option unless shown otherwise on the construction plans. In no case will the minimum base and sub-base depth be less than that shown on the construction plans.

C. A temporary surface course may consist of asphalt concrete cold-mix if an asphalt concrete surface is unavailable due to temperature or if directed by the Owner due to high traffic volumes. This thickness shall be at the Contractor's option unless shown otherwise in the Contract Documents, and in no case shall the thickness of the temporary surface course be less than that resulting from the application of a "double surface treatment" that consists of two layers of CRS-2 or RC-250 at 0.30 gal/sy and No. 68 stone at 35 lbs/sy. All excavated areas shall be backfilled with base stone and asphalt concrete prior to opening the roadway to traffic. Generally all roadway areas shall be opened to traffic at the end of the workday unless otherwise directed by the Owner.

D. In order to minimize the duration and frequency of disruption to streets and pavements, the Contractor shall conduct his operations such that installation of laterals and services shall closely follow installation of mains. The intent of this requirement shall be to insure that disruption of the pavement and traffic on any given street or area shall, as much as possible, be limited to "one event" (i.e., disruption for installation of mains followed by a time delay and subsequent disruption for installation of laterals will not be tolerated or permitted). Installation of the temporary surface course over mains and laterals shall proceed orderly behind the installation and backfill of the improvements.

E. The Contractor shall diligently and continuously maintain the base course prior to placement of the temporary surface course and the temporary surface course prior to the placement of the permanent surface course by grading, adding materials, removing and replacing components, or any other measures necessary to provide a smooth and passable surface free from pot holes, depressions and irregularities.

F. Installation of the permanent surface course shall commence at the completion of the utility installation on each street, but not later than 60 calendar days after the initial cut has been made. If, in the opinion of the Owner, the pavement patch is of adequate quality, the 60-calendar day requirement may be extended.

## 2.3. TOLERANCES

- A. Riding quality of the finished surface is very important. The completed pavement will be checked longitudinally and transversely for smoothness with a (10') ten-foot straight edge. Surface tolerance will not vary more than 1/8-inch in 10-foot parallel to the centerline and not more than 1/4-inch in 10-foot at right angles to the centerline. All humps and/or depressions exceeding this specified tolerance shall be corrected or the defective Work removed and replaced with new material at no additional cost to the Owner.
- B. The pavement section shall be in accordance with that shown in the Contract Documents.

## III. MEASUREMENT FOR PAYMENT

- A. Where the pipe centerline lies outside the paved surface no measurement shall be made for pavement patching.
- B. The width of the patching or restoration will not be measured, but shall be the maximum permissible trench width plus two feet as indicated on Standard Detail RC\_01. Maximum permissible trench width is as indicated on Detail EW-03. It shall be the responsibility of the Contractor to minimize the width disturbed or removed.
- C. The temporary surface course shall be in accordance with that shown in the Contract Documents and is to be measured along the centerline of the pipe where the centerline of the pipe lies within a paved surface. The lengths so determined will be paid for at the unit price bid per lineal foot or per square yard specified for temporary pavement patching as indicated on the Bid form, and shall include all labor, materials, and equipment necessary to furnish, install, and maintain the base course and temporary surface course (all materials above the trench backfill).
- D. The permanent surface patch, if required and indicated on the Bid form, shall be in accordance with the permanent pavement section shown in the Contract Documents, and will be measured and paid for per Section 315, including the cost to remove the temporary surface course.
- E. Milling and asphalt overlay, if required, shall be measured and paid separately in accordance with Sections 515 and 315, respectively.

End of Section