

SECTION 02130 – REMOVAL AND RESURFACING OF PAVEMENT SURFACES

PART 1 – GENERAL

1.1 WORK OF THIS SECTION

- A. Street pavement and surfaces shall be removed and replaced in all areas of construction excavation in conformance with details shown on the approved plans and as specified herein. Resurfacing of existing pavement and surfaces damaged or removed in connection with the construction of project improvements including all appurtenances, shall conform to the provisions of the Water Utilities Manual and permits issued by the AGENCY.

1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. Section 01570 – Traffic Regulations
- B. Section 02200 – Earthwork
- C. Section 02223 – Trenching, Backfilling, and Compacting
- D. Section 02743 – Asphalt Concrete Pavement

PART 2 – MATERIALS

2.1 EARTHWORK

- A. Earthwork shall conform to the provisions of the standard specifications.

2.2 PAVEMENT REMOVAL

- A. General: Street pavement or existing road surface shall be removed within the limits of all construction excavations prior to proceeding with excavation operations of any nature. Surplus material shall be removed as specified in the Specifications. Prior to removal of existing surfacing, pavement cuts for pipelines shall be made as shown on the Plans and/or specified herein. All pavement cuts for pipelines shall be neat and straight along both sides of the trench and parallel to the alignment of the pipe to provide an un-fractured and level pavement joint for bonding existing surfacing with pavement replacement. Where large irregular surfaces are removed, such trimming or cutting as hereinafter provided shall be parallel with roadway centerline or at right angles to the same. All cut edges shall provide clean, solid vertical faces free from all loose material.
- B. Portland Cement Concrete Surfaces: Concrete pavement, including cross gutters, curbs and gutters, sidewalks, driveways, and concrete surfaces of whatever nature, shall be saw cut to a minimum depth of 10 inches prior to removal in accordance with details shown on the Plans or as specified herein. Said saw cut shall be made at the edge of the trench and/or excavation. With the written permission of the AGENCY pneumatic tools or other approved equipment may be used to cut concrete pavement prior to removal at the limits of the excavation. In such an event, the saw cut provided herein, shall be made after backfilling, and the additional

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concrete pavement shall be removed and disposed of by the CONTRACTOR prior to resurfacing.

- C. Plant Mix Surfacing (Asphalt Concrete Pavement): Streets, alleys and areas surfaced with asphalt concrete pavement shall be initially cut by means of pneumatic pavement cutters or other approved equipment at the limits of the trench and/or excavation prior to removal of surfacing. Pavement saw-cutting will be required within the AGENCY'S right-of-way.

2.3 ASPHALT CONCRETE RESURFACING

- A. In all areas in which the surface is removed, broken or damaged by equipment, or in which the ground has caved in or settled due to the installation of the improvements, the surface shall be restored to the original grade and crown section by the CONTRACTOR at its own expense. In the absence of specific designation on the Plans, and where the street has been improved with roadway surface, base course, curb, sidewalk or gutter, trenches, or damaged sections shall be restored with the type of improvement conforming to that which existed at the time the CONTRACTOR entered upon the work. Prior to resurfacing, the existing surface shall be removed as provided above. All work shall match the appearance of the existing improvements and finished pavement shall not deviate from existing grade by more than 1/8-inch in 10-feet and shall be free from ruts, depressions and irregularities. Where large irregular surfaces are to be resurfaced, existing surfacing shall be cut and removed as provided herein. Asphaltic emulsion per the standard specifications shall be applied to the vertical faces of all asphaltic concrete pavements against which the pavement replacement materials are to be placed. The completed surface, when ready for acceptance, shall be thoroughly compacted, true to grade and cross section, and shall be free from ruts, depressions and irregularities.
- B. Asphalt pavement placed within the trench line shall be a minimum of 1-1/2 inches deeper than the existing pavement and filled and compacted with a 3/4-inch PG 64-10 base course of asphalt concrete per Standard Drawing M-3A of the City Engineers Manual. Aggregate base shall be a minimum of six (6) inches thick, or as recommended by the Geotechnical Engineer, or as shown on the Project Plans. Final trench repair will be completed with cold-plane or grinding within the trench line and a minimum of one (1) foot on each side of the trench to a depth of 1-1/2 inches and then placing and compacting new 1/2-inch PG 64-10 asphalt concrete ground out area. Any resulting edge of contact between the new and existing pavement on each side shall parallel the existing trench and be a straight and neat join line.

2.4 RESURFACING OF CONCRETE SURFACES

- A. Portland Cement concrete pavement surfaces shall be replaced in kind, with an aggregate base layer 8-inches minimum thickness. Minimum thickness of concrete pavement shall be equal to that removed.
- C. Portland Cement concrete sidewalks and driveways shall be replaced to the nearest score line or over a sufficient width to replace any portions of the sidewalk or

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driveway damaged, fragmented, cracked or otherwise made unusable as a result of construction operations. Minimum thickness of concrete shall be 4-inches in walkways, 6-inches in residential driveways, and 8-inches in commercial driveways.

2.5 PORTLAND CEMENT CONCRETE

- A. Portland Cement concrete shall be minimum Class 560-C-3250 and shall conform to the related Section of the Standard Specifications for Public Works Construction (SSPWC or Greenbook), latest edition.
- B. Concrete shall be placed over the width of the excavated trench where the edge of the trench is more than 2-feet from the edge of an existing concrete excavation and is within 2-feet of the existing gutter.

2.6 TEMPORARY PAVING – HOT MIX

- A. All pavement removal for trenching operations shall be replaced with a minimum of 4-inches of compacted temporary asphalt concrete as specified above after aggregate base compaction is approved by the geotechnical engineer. Cold mix will not be allowed under any circumstances.
- B. Cross streets and all accesses shall be paved with temporary pavement on the same day that excavation is made. Temporary pavement shall be maintained so that a smooth traversable surface is available at all times for vehicular traffic, free from ruts, depressions, holes, and loose gravel. Cost for temporary paving shall be at the CONTRACTORS expense.

PART 3 – EXECUTION

3.1 GRINDING

- A. All grinding for recessed trench plating and asphalt concrete overlay shall be accomplished per the standard specifications.

3.2 TEMPORARY SURFACING

- A. The CONTRACTOR shall promptly place temporary surfacing on all areas where existing surfacing has been disturbed and shall maintain such surfacing for the period of time required by the AGENCY. Temporary resurfacing shall be constructed in accordance with the following requirements.
 - 1. The subgrade shall be uniformly watered sufficiently to eliminate all dust, but not to such extent as to form mud or pools of water. The street and surrounding area shall be cleared of rubbish and debris. The street shall be swept with a power sweeper with spray nozzle and the surrounding area shall be cleaned thoroughly, at least weekly, or more frequent as conditions dictate.
 - 2. The temporary resurfacing shall then be spread over the prepared foundation material and rolled with an 8-ton tandem roller in such a manner that after

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rolling, the temporary resurfacing shall present a smooth surface for traffic, shall not be less than 4-inches in compacted thickness and shall be maintained free from bumps and depressions until permanent resurfacing is placed. The finished surface of said temporary resurfacing shall be flush with the adjoining pavement grade.

3. The temporary resurfacing shall be left in place until permanent resurfacing is constructed.

3.3 PERMANENT RESURFACING

- A. In order to obtain a satisfactory junction with adjacent surfaces, the CONTRACTOR shall grind 12-inches beyond the saw cut edges to a depth of 1-1/2 inches so as to provide a clean, sound, vertical joint before permanent replacement of an excavated or damaged portion of pavement. Damaged edges of pavement along excavations and elsewhere shall be trimmed back by saw cutting in straight lines. All pavement restoration and other facilities restoration shall be constructed to finish grades compatible with adjacent undisturbed pavement. CONTRACTOR is responsible for the replacement of traffic detector loops damaged or removed during construction which are associated with existing traffic controls.

3.4 RESTORATION OF SIDEWALKS OR PRIVATE DRIVEWAYS

- A. Wherever sidewalks or private roads have been removed for purposes of construction, the CONTRACTOR shall place suitable temporary sidewalks or roadways promptly after backfilling and shall maintain them in satisfactory condition and the CONTRACTOR shall maintain said temporary sidewalks or roadways until the final restoration thereof has been completed. The sidewalks or driveways shall be removed and replaced in kind to the nearest joint.

****END OF SECTION****