

**SECTION 14 - RESTORATION OF SURFACES
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SECTION 14 RESTORATION OF SURFACES

14-1 GENERAL

All existing curbs, gutters, sidewalks, driveways, road shoulders, pavement, and similar items removed, damaged, cracked, or displaced during the Work shall be restored by the Contractor. Restoration shall be done using the same types of materials as in the original construction, and to not less than the original dimensions, subject to minimum requirements specified herein, as shown or as specified in the Contract, or as directed by City. All work shall be constructed to match current standards and shall match the appearance of the existing improvements.

14-2 PRIVATE ROADS

Trench compaction shall conform to the requirements in Section 19, “Trench Excavation, Bedding and Backfill”, of these Specifications. Where asphalt surfacing exists, the surface restoration shall be a minimum of four inches (4”) of aggregate base and two inches (2”) of asphalt concrete, but in no case shall the thickness of either the asphalt or the thickness of the aggregate base be less than the thickness of the corresponding portions of the existing private road. Aggregate base and asphalt concrete shall be as specified in Section 14-3, “Streets and Parking Lots”, in this Section of these Specifications. Where gravel, stone, or crushed rock surfacing exists, surface restoration shall consist of a minimum of four inches (4”) of aggregate base, but in no case shall the thickness of the aggregate base be less than the thickness of the existing surface of the private road. The remaining gravel or stone roadway shall be reshaped to preconstruction cross section and given an application of a minimum of two inches (2”) of three-quarter inch (3/4”) maximum size gravel or crushed rock compacted into place. The restored surface of a private road shall be at least equivalent to the preconstruction surface condition.

14-3 STREETS AND PARKING LOTS

Attention is directed to the requirements specified in Section 12, “Construction Area Traffic Control”, of these Specifications.

Repaving of trench areas in bituminous pavement shall be in accordance with the applicable “ST” Standard Drawing. The asphalt concrete shall be placed as specified in Section 23, “Asphalt Concrete”, of these Specifications.

AC trench patches that settle 1/4” to 1/2” shall be milled to 1-1/2” and repaved. AC trench patches that settle more than 1/2” shall be excavated to suitable material and replaced per Section 14-3.02.

14-3.01 Aggregate Base

The aggregate base materials and placement shall meet the requirements of Section 22, “Base Material”, of these Specifications.

14-3.02 Asphalt Concrete

Immediately prior to placing asphalt concrete pavement, the top four inches (4”) of base material, or more where greater depth of paving is shown on the Plans, shall be recompact to a minimum relative compaction of ninety-five percent (95%). Base or underlying material that is wet, loose, or otherwise unsuitable for supporting the new paving shall be removed, to a minimum of twelve inches (12”), and replaced with aggregate base material and compacted in layers not exceeding six inches (6”) in depth to a minimum relative compaction of ninety-five percent (95%). If unsuitable material is evident, see Section 18-5, “Unsuitable Material Excavation”, of these Specifications. Edges of trenches that are broken or damaged shall be removed and neatly trimmed back to stable and undisturbed base and surface materials.

The edges of the existing pavement shall be given a tack coat of asphaltic emulsion. The trench shall then be filled and compacted, in layers not to exceed two inches (2”), with asphalt concrete, Type “A”, conforming to Section 23, “Asphalt Concrete”, of these Specifications until the trench has been

brought to approximately two inches (2”) below the finish grade and cross section of the street. The Contractor shall immediately repair any settlement more than one inch (1”) below finish grade.

Prior to placement of the second lift, the surface of the first lift of pavement and the edges of the existing pavement shall be given a tack coat of asphaltic emulsion. The trench shall then be filled and compacted with asphalt concrete Type "A", one-half inch (1/2”) or three-quarter inch (3/4”) maximum gradation, as specified above, until the pavement has been brought to the final grade and cross section of the street.

14-3.03 Seal Coats

Seal coat treatment shall be applied at locations specified, as shown on the Plans or as directed by the City. Seal coat shall not be placed until at least seventy-two (72) hours after placement of the final paving lift. All subdivision streets will be slurry sealed as part of final warranty work, or when all building construction is complete. Should building construction not be completed at the end of the warranty period, the slurry seal and pavement markings shall be deferred to an encroachment permit with adequate security to cover the costs for those improvements as deemed by the City. Permit holder agrees to complete the necessary slurry seal and pavement marking within thirty (30) calendar days of written notice from the City, weather dependent.

14-3.03.A Single Seal

Alternate 1 - Slurry seal shall be furnished and placed as specified in Section 37-2, “Slurry Seal”, of the State Specifications, with the exception that the fifth paragraph of Section 37-2.06, "Placing", shall be modified to provide that the thickness of application of slurry seal shall be adjusted to provide one (1) layer not less than one-eighth inch (1/8”) thick nor greater than one-quarter inch (1/4”) thick. The requirement for wetting surface prior to placement of slurry seal is waived.

Alternate 2 - Sand seal shall be furnished and placed as specified in Section 37-1, "Seal Coats”, of the State Specifications with the exception of the requirements for the asphaltic binder and aggregate. Asphaltic binder and aggregate shall be as follows:

The asphaltic materials for the construction of sand seal shall conform to the requirements in Section 50-17, “Asphalt, Liquid Asphalt, and Asphaltic Emulsion”, of these Specifications. The asphaltic materials shall be CRS 1. The rate of application of CRS 1 shall vary between 0.08 and 0.15 gallons per square yard as directed by the City, depending upon the surface condition and weather.

Aggregate for sand seal shall conform to Section 37-2.02C, “Aggregate”, of the State Specifications and shall be spread at the rate of six (6) to ten (10) pounds per square yard, or as directed by the City.

Alternate 3 – At the written approval of the City Inspector, “Overkote” or equal may be used for streets with minimal damage.

Preparation of seal coat, applying bituminous binder, spreading, and finishing shall be in accordance with Section 37, “Bituminous Seals”, of the State Specifications, with the exception that steel wheeled rollers for sand seal may be eliminated and the pneumatic roller used for all seal operations.

All bituminous pavement replacements and seal shoulders sealed under one of the above alternates shall receive the seal coat for the full width of the trench or pavement replacement, plus a minimum of twenty-four inches (24”) on each side of the trench, except that seals shall not overlap concrete curb and gutter.

14-3.03.B Double Seal

The areas shown on the Plans or directed by the City shall receive a double seal coat treatment. The first seal coat of the double seal shall be the course seal coat specified in Section 37, “Bituminous Seals”, of the State Specifications. The final seal shall be as specified in Section 14-3.03.A, “Single Seal”, in this Section of these Specifications, for a single seal.

14-3.04 Shoulders

Surface restoration of trenches located in a shoulder within six feet (6') of the traveled way shall consist of a structural section equal to the original, or as shown on the Plans, but having a minimum of five inches (5") of aggregate base compacted to a relative compaction of ninety-five percent (95%). This aggregate base shall then receive a double seal coat treatment as specified in Section 14-3.03.B, in this Section of these Specifications unless otherwise specified in the Special Provisions or directed by the City.

14-3.05 Cuts in New Pavement

Cuts in pavement that has been constructed within the last five (5) years, or those streets that have been overlaid with asphalt concrete greater than one inch (1") in depth, shall be treated as follows:

The existing pavement around the cut shall be planed to a depth of one and one-half inches (1 1/2") in accordance with the requirements of Section 26, "Cold Plane Asphalt Concrete Pavement", of these Specifications. The planed area shall extend on each side of the cut as shown on the applicable "ST" Standard Drawing. The planed area shall be given a tack coat of asphaltic emulsion and paved with one and one-half inches (1-1/2") of asphalt concrete, Type A, and compacted as specified in these Specifications. A seal coat shall be applied to all edges.

14-4 CONCRETE

Repairs to concrete curbs, gutters, sidewalks, driveways, and other concrete surfaces shall be made by removing and replacing the entire portions between joints or scores, except as follows:

Curb and gutter shall be replaced between saw cuts so that the remaining or new curb and gutter will not be less than four feet (4') in length, measured from the saw cut to the nearest score mark, expansion joint, construction joint or weakened plane joint. Dowels and/or epoxy are mandatory with frequency and placement as per City representative. Greased dowels are also permitted where applicable.

The entire width of sidewalk shall be replaced between saw cuts for a length of not less than four feet (4') providing the remaining sidewalk shall not be less than four feet (4') in length, measured from the saw cut to the nearest score mark, expansion joint, construction joint or weakened plane joint.

Driveways shall be replaced as directed by the City, either completely or partially by saw cutting in the middle of the driveway.

Damaged asphalt concrete adjacent to curb and gutter shall be removed and replaced to minimum of 2' beyond the damaged area, or as directed by the Inspector.

Replacement shall be in accordance with the applicable requirements, including the placement of Aggregate Base Class 2 under the new concrete as specified in Section 27, "Curbs, Gutters, Sidewalks, and Drainage Structures", of these Specifications, except provisions for payment, for the type and classification of work set forth in other Sections of these Specifications. Pedestrian access shall be maintained in accordance with Section 6-12.02, "Pedestrian Access", of these Specifications. Dowels shall conform to Section 31, "Reinforcement" of these Specifications.

14-5 PAVEMENT MARKINGS

Except where specified otherwise in these Specifications or the Special Provisions, the Contractor will replace all crosswalks and other permanent pavement markings and raised markers that have been disturbed, destroyed, or covered by the Work. If the Special Provisions indicate that the City will replace pavement markings, the Contractor shall pay the current prices per square foot for pavement markings or unit price per marker to the City, and City forces will replace the markers or markings on the completed surface. The current prices per square foot for pavement markings or unit

price per marker are specified in the Contract.

Pavement markings damaged by construction activities during the warranty period will be repaired or replaced at the end of the warranty period.

14-6 TEMPORARY PAVING

Temporary paving shall be placed at locations shown on the Plans or as directed by the City. Asphalt concrete Type "A", conforming to Section 23, "Asphalt Concrete", of these Specifications, shall be used as temporary paving on all major streets (see Section 12-3.07, "Flashing Arrow Sign", of these Specifications, for definition) and two-lane roadways. Temporary paving in all other paved areas may be asphalt plant-mix cutback, unless otherwise directed by the City. Thickness of temporary paving shall be one and one-half inches (1-1/2") unless otherwise shown on the Plans. Temporary paving shall be maintained at the same level as the existing pavement until the permanent surfacing is placed.

14-7 MEASUREMENT AND PAYMENT

The lump sum price paid for items of work included in the Contract for restoration of surfaces removed, damaged, or displaced by the Work includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved, complete in place, as shown or as specified in the Contract, specified in these Specifications, and as directed by the City.

If no item is included in the Contract for restoration of surfaces, full compensation for conforming to the provisions in this Section (Section 14), not otherwise provided for, is included in the prices paid for the various items of work involved, and no separate payment will be made. Temporary paving will be measured for payment by weight of asphalt concrete placed in the Work, in accordance with Section 39-8.01, "Measurement", of the State Specifications.

The price paid per ton for temporary paving includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in temporary paving, complete in place, as shown or specified in the Contract, specified in these Specifications, and directed by the City.

If there is no item in the Contract for temporary paving, full compensation for conforming to the provisions in this Section, not otherwise provided for, is included in the prices paid for the various items of work involved, and no separate payment will be made.