

This specification outlines the requirements for the supply and placement of materials to repair the asphaltic concrete removed in the carrying out of the works.

## PART 1 REFERENCES

This specification refers to the following standards, specifications, or publications:

ASTM International

D977	Standard Specification for Emulsified Asphalt
<del>D6690</del>	<del>Standard Specification for Joint and Crack Sealants, Hot Applied, for Concrete and Asphalt Pavements</del>
<del>D2419</del>	<del>Standard Test Method for Sand Equivalent values of Soils and Fine Aggregate</del>

## PART 2 GENERAL

### 2.1 NOT APPLICABLE

## PART 3 PRODUCTS

### 3.1 MATERIALS

- .1 Granular base: material in accordance with Section 02233 – Selected Granular Base & Subbase.
- .2 Asphaltic concrete shall be in accordance with Section 02552 – Hot Mix Asphaltic Concrete Pavement. Recycled asphalt may be used only if it is included in the MERX Schedule of Quantities & Prices and only in areas indicated in the drawings.
- .3 Tack Coat: in accordance with Section 02547 – Asphalt Tack Coat.
- ~~.4 Tack coat shall consist of SS-1 (Slow setting) emulsified asphalt diluted with an equal volume of water prior to the application in accordance with ASTM D977.~~

## PART 4 EXECUTION

### 4.1 EXAMINATION

- .1 Verification of Conditions: verify that conditions of substrate previously installed under other Sections or Contracts are acceptable for reshaping

asphalt pavement installation in accordance with manufacturer's written instructions.

- .1 Visually inspect substrate in presence of the Owner.
- .2 Inform the Owner of unacceptable conditions immediately upon discovery.
- ~~2.3~~ Proceed with installation only after unacceptable conditions have been remedied and after receipt of written approval to proceed from the Owner.

3.2 CONSTRUCTION

3.34.2 PLACEMENT AND TIMING RESTRICTIONSWEATHER LIMITATION:

- .1 Placement and Timing Restrictions in accordance with Section 02552 - Hot Mix Asphaltic Concrete Pavement with the following exceptions: Permanent patching shall be carried out only when the temperature of the air is 7 °C and rising and when not raining.
- .1 Asphalt patching placement after the cut-off dates and before the spring season ~~October 15~~ shall be temporary patching and may be replaced with permanent patching the following spring seasonsummer at the discretion of the Owner.
- .2 Temporary patching when the conditions are outside the requirements may be specified by the Owner, ~~when the ambient air temperature is less than 7 °C~~, for one winter use and may be replaced with permanent patching the following construction season once placement conditions are met ~~summer~~.
- .2 Time Limitation:

4.3 PULVERIZING AND RESHAPING

- .1 Pulverize asphalt material in accordance with Section 02576 – Pulverize Existing Asphalt.
- .2 Scarify and reshape granulars in accordance with Section 02231- Scarifying & Reshaping or 02232 – Reshaping only (up to 100 mm).
- .3 Blade and trim pulverized pavement material to elevation and cross section dimensions as directed by the Owner.
- .4 Cutting Out:
- .3 The areas to be patched shall be agreed upon by the Owner. The Contractor shall cut out the sections marked true and square with a power buster or other means acceptable to the Owner to expose a fresh vertical face clear of any broken or loose material.

- .4 If the Contractor removes or damages pavement or surfaces beyond the limits specified above, such pavement and surfaces shall be replaced or repaired at the expense of the Contractor.
- .5 The minimum width for asphalt removal and replacement adjacent to concrete will be 0.5 m.
- .6 The top 50 mm lift of existing asphalt is to be milled back 300 mm into the existing asphalt.

#### 4.4 PATCH PREPARATION

- .5.1 Before any placing of asphalt, the Contractor shall compact all backfilled materials and place and compact to minimum of 95 % corrected maximum dry density, where the maximum dry density is determined in accordance with ~~to~~ ASTM D698 and corrected as specified in Section 02501 – Corrected Maximum Dry Density Modified Proctor Density, of granular base A to the thickness of original bedding and to a maximum of 150 mm in accordance with Section 02233 - Selected Granular Base & Subbase. The Contractor shall also ensure that all asphaltic patching shall be equal in thickness to the original pavement but in no case shall be less than 50 mm or more than 1100 mm.
- .6.2 Holes to be patched shall have all loose material removed and be cleaned of dirt and gravel.
- .7 Application of Asphaltic Material:
- .8.3 In all areas where new asphalt is to meet existing asphalt, a tack coat ~~of asphaltic cement~~ is to be applied to the face of the existing asphalt prior to placing the asphaltic concrete. Surfaces shall be thoroughly dry before tack coat is applied.
- .9 Placing Asphalt:

#### 3.44.5 PLACEMENT, SPREADING AND FINISHING:

- .1 Spreading and finishing shall be carried out as specified. A mechanical spreader shall be used on areas that are deemed by the Owner to be large enough for such application.
- .2 Rolling:
- .2 Rolling shall be in accordance with Section 02552 - Hot Mix Asphaltic Concrete Pavement.
- .3 Asphaltic concrete shall be placed and leveled in the area in one or more lifts as indicated by the Owner.
- .4 Temporary asphalt shall be 40 mm thick.

~~3.5~~ Compact the patches in accordance with Section 02552 - Hot Mix Asphaltic Concrete Pavement.

Clean-Up:

#### 4.6 FINISH TOLERANCES

- .1 Reshape surface to within plus or minus 10 mm of elevation as indicated, but not uniformly high or low.
- .2 The patch must be level with the surrounding pavement and have a smooth driving surface.
- .3 Correct surface irregularities by loosening and adding or removing material until surface is within specified tolerance.

#### 4.7 CLEANING

- .1 Progress Cleaning: clean in accordance with Section 01710 – Reinstatement and Cleaning.
  - .1 Leave Work area clean at end of each day.
- .2 Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment in accordance with Section 01710 - Reinstatement and Cleaning.
- .3 The Contractor shall dispose of all cut out asphaltic concrete or waste materials at a dumping site approved by the Owner.

#### 4.8 PROTECTION

- ~~4.1~~ Protect and maintain reshaped asphalt pavement surface in condition conforming to this section until succeeding material is applied or until after receipt of written acceptance from the Owner.

### PART 5 PAYMENT

#### 4.45.1 MEASUREMENT FOR PAYMENT

- .1 Measurement for removal and replacement of existing asphalt pavement removed during trench excavation shall depend on the width of trench in accordance with Section 02223 – Excavating, Trenching and Backfilling for the installation of the pipe and the following:
  - .1 –The width of pavement removed along the trench for the installation of the pipe shall not exceed 500 mm each side of the specified trench width for main lines 0 to 4 m deep, not exceed

1000 mm each side of the specified trench width for main lines greater than 4 m to 6 m deep and not exceed 1500 mm each side of the specified trench width for main lines greater than 6 m deep.

~~4.2~~ The width of pavement removed along the trench for the installation of pipe in service laterals shall not exceed 300 mm each side of the specified trench width for service lines 0 to 4 m deep, and not exceed 600 mm each side of the specified trench width for service lines greater than 4 to 6 m deep, and not exceed 900 mm each side of the specified trench width for service lines greater than 6 m deep.

~~2.1~~ If the Contractor removes or damages pavement or surfaces beyond the limits specified above, such pavement and surfaces shall be replaced or repaired at the expense of the Contractor.

~~3.2~~ Asphalt removal and disposal designated in the contract documents or as directed by the Owner for thicknesses up to 110 mm shall be paid by the square metre to the lines established by the Owner. Thicknesses over 110 mm shall be paid by the square metre unit price prorated on the basis of price per 110 mm.

~~4.3~~ Asphalt patching of approved asphalt removed, as designated in the contract documents or as directed by the Owner, shall be paid by the square metre including patch preparation such as asphalt cutting, tack coat, compaction of granular base, ~~asphalt cement on existing asphalt faces~~, milling, as well as placing of new asphalt. The ~~milled width is top 50 mm lift is to be milled back 300 mm into the existing asphalt. This milling width is to be~~ included in the measurement.

~~5.1~~ The minimum width for asphalt removal and replacement adjacent to concrete will be 0.5 m.

~~6.4~~ Temporary asphalt patching, as designated in the contract documents or as directed by the Owner, shall be paid by the square metre including placing and compaction of granular base. Temporary asphalt shall be 40 mm thick.

~~7.5~~ For pothole patching, cutting shall be paid by the linear metre. All other patching/paving items have the cutting considered incidental to the unit.

#### ~~4.25.2~~ BASIS OF PAYMENT

.1 All costs associated with the work outlined in this specification shall be deemed to be included in the appropriate unit and lump sum prices quoted as outlined in the Measurement for Payment subsection of this section and as included in the MERX Schedule of Quantities and Prices.

- .2 Asphalt work for a section of work (as determined by the Owner) less than 2.5 metres wide shall be a patch regardless of the length. Asphalt work for a section of work (as determined by the Owner) less than 100 square metres shall be a patch. All other asphalt work (as determined by the Owner) will be paid by the tonne in accordance with Section 02552 - Hot Mix Asphaltic Concrete Pavement.
- .3 Recapping of asphalt patching when directed by the Owner will be paid for by the tonne in accordance with Section 02552 – Hot Mix Asphaltic Concrete Pavement.
- .4 Driveway reinstatement or patching will be paid under and in accordance Section 01710 - Reinstatement and Cleaning. Driveways are not considered patching under this section unless otherwise noted.

Not For Construction