

## **1.0 SITE PREPARATION**

### **1.1 GENERAL**

- .1 Protect trees, shrubs, lawns, planted areas, and other features remaining as part of final landscaping.
- .2 Protect buildings, sidewalks, curbs and paved areas against damage.
- .3 Restore to original condition any and all damage to private and public property.
- .4 Protect bench marks and reference lines from damage. Re-establish if disturbed or destroyed.
- .5 Supply and install adequate barriers, fences, warning and construction signs to prevent injury to the public. Maintain such barriers in good condition at all times.
- .6 Prior to commencement of work, have underground utilities located in the work area. Notify the Project Manager and Utility Departments 48 hours before excavating any utility line locates.
- .7 Protect active utility lines exposed by excavation from damage, as instructed by the Utility Department or Company. Final excavation in the area of any utility lines to be done by hand.

## **2.0 PRODUCTS**

### **2.1 MATERIALS**

- .1 Primer: SS-1.
- .2 Tack Coat: SS-1 diluted with water.
- .3 Asphalt Pavement: City of Medicine Hat Type S2.

### **2.2 ASPHALT PAVEMENT MIXTURE**

- .1 Asphalt Paving: Hot plant mix consisting of crushed gravel aggregate, and asphalt cement binder as specified.
- .2 Asphalt plant standards to ASTM D995.

- .3 Asphalt mixes to be prepared according to ASTM D3515.
- .4 Submit to the Project Manager a design mix formula for approval three (3) days prior to actual paving work in field.
- .5 Do not change proportions of the design mix. The design mix shall not be changed during the work without submission of a new design mix formula.
- .6 Submit a Design Mix based on the following criteria: 13 mm (1/2 inch) mix with 50 blows per specimen.

### **3.0 EXECUTION**

#### **3.1 BASE**

- .1 Examine prepared base before paving. Report defects in base to the Project Manager. Do not commence work if the base is unsatisfactory.
- .2 Strip existing shale off. Existing shale to be removed and disposed of at trail edge (.3m width).
- .3 Remove and dispose of excess material off site at Parks and Outdoor Recreation Department Maintenance Yard (88 Kipling St SE).
- .4 Provide equipment to load test base.
- .5 Excavate soft areas of subgrade, replace with sub-base gravel as required.
- .6 Carefully compact the existing shale trail to 100% Maximum Dry Density.

#### **3.2 PRIMER**

- .1 Apply primer at rate of 0.90 litres per square metre to 2.20 litres per square metre with asphalt pressure distributor.
- .2 Allow primer to set.

#### **3.3 TACK COATS**

- .1 Apply tack coat at rate of 0.23 litres per square metre to 0.50 litres per square metre with pressure distributor.
- .2 Ensure tack coat is thin and applied lightly.

### **3.4 ASPHALT CONCRETE PLACEMENT**

- .1 Notify the Project Manager seventy-two (72) hours prior to paving.
- .2 Apply asphalt when temperature is above 8 degrees Celsius, and monitor weather forecasts to determine the optimum paving schedule.
- .3 For shale trail overlay, proceed with asphalt paving, consisting of 75 mm (3 inches) of Type 4 asphalt. Blend shale and asphalt areas, as required.
- .4 For asphalt trail overlay, proceed with asphalt paving, consisting of 50 mm (2 inches) of S2 asphalt. Blend newly asphalted areas.
- .5 Compact to 97% of Marshall Design Density.
- .6 No payment will be made for asphalt areas with a compaction less than 93% of Marshall Design Density. Remove and replace any asphalt with a Marshall Design Density of less than 93% at no expense to the Project Manager.
- .7 Trueness of surface: 5 mm (3/16 inch) maximum depression per 3.0 m (10 feet).
- .8 Finish roll with a rubber tired roller.
- .9 The trail edge is to be machine packed wherever possible and hand packed as a minimum to ensure a true, straight, packed edge. Excess asphalt material is to be cleaned up and removed.

### **3.5 MANHOLES, VALVES, ETC.**

- .1 During paving operations, ensure positive surface drainage to catch basins and catch basin manholes.
- .2 Ensure that surface run off will not drain into sanitary sewer manholes.
- .3 Do not pave over manholes or water valves.

### **3.6 TRAFFIC**

- .1 Keep vehicular traffic off newly paved areas until pavement surface temperature has cooled below 30 degrees Celsius. No stationary loads shall be permitted on the pavement until twenty-four (24) hours after placement.

### **3.7 JOINTS**

- .1 All cold joints are to be cut back and a butt joint formed.

### **4.0 SITE REHABILITATION**

- .1 The Contractor shall take every precaution not to damage, injure or mark all existing surfaces, structures, utilities or landscaping on the City owned property or adjacent private properties.
- .2 Any damage that may be caused by the Contractor, his employees or equipment or subcontractors shall be restored to pre-construction condition at the Contractor's expense and to the satisfaction of the Project Manager.
- .3 The Contractor shall reseed the trail edge of the shale trails that have been overlaid with a coarse grass seed as required.

**END OF SECTION**