

PWGSC	ASPHALT	Section 32 12 16
Replacement of Petroleum	CONCRETE PAVING	Page 1
Storage Tanks, Bldg A5		
Springhill Institution		2016-01-04
Project# R.061879.001		

## **PART 1. GENERAL**

### **1.1 RELATED SECTIONS**

- .1 Section 03 30 00 - Cast-in-Place Concrete
- .2 Section 31 14 11 - Earthwork and Related Work
- .3 Section 33 30 00 - Precast Manholes, Catch Basins and Structures
- .4 Section 01 33 00 - Submittal Procedures

### **1.2 STANDARDS**

- .1 Nova Scotia Transportation and Infrastructure Renewal Standard Specification - Highway Construction and Maintenance.
- .2 Transportation Association of Canada: Manual of Uniform Traffic Control Devices for Canada

## **PART 2. PRODUCTS**

### **2.1 MATERIALS**

- .1 Asphalt materials: to Province of Nova Scotia Department of Transportation and Infrastructure Renewal Standard Specification - Highway Construction and Maintenance.

### **2.2 ASPHALT CONCRETE**

- .1 Asphalt concrete mix: to Nova Scotia Transportation and Infrastructure Renewal Standard Specification - Highway Construction and Maintenance, Division 4, Section 4, mix Type C.

## **PART 3. EXECUTION**

### **3.1 GENERAL**

- .1 Use workers skilled in placing asphalt concrete.

### **3.2 FINE GRADING**

- .1 Fine grade gravel surface to within 10mm of elevations and cross sections indicated immediately prior to placement of asphalt materials. Add or remove gravel as required. Compact to 100% Standard Proctor Density.

### **3.3 ADJUSTING TOPS OF COSTING**

- .1 Prior to placing asphalt surface course: of Castings:
  - .1 Adjust manhole covers and catch basin frames to match asphalt surface, using manufactured or cast-in-place grade rings where applicable.
  - .2 Adjust valve boxes to finished asphalt surface. Raise or lower top sections of valve boxes where applicable.

### **3.4 PRIME COAT**

- .1 When required by the Project Documents, apply prime coat to Nova Scotia Transportation and Infrastructure Renewal Standard Specification - Highway Construction and Maintenance, Division 4, Section 5.

### **3.5 TACK COAT**

- .1 Apply tack coat on existing asphalt concrete to Nova Scotia Transportation and Infrastructure Renewal Standard Specification - Highway Construction and Maintenance, Division 4, Section 1. Apply tack coat to contact surface of curbs, castings and structures.

### **3.6 PAVING**

- .1 Transport, place and compact asphalt concrete mix to Province of Nova Scotia Department of Transportation and Infrastructure Renewal Standard Specification - Highway Construction and Maintenance. Construct pavement within specified tolerances to lines, elevations, cross sections and dimensions at locations indicated.
- .2 Thickness of new asphalt concrete paving to match existing.

**END OF SECTION**

**PART 1. GENERAL**

**1.1 RELATED SECTIONS**

- .1 Section 03 30 00 - Cast-in-Place Concrete
- .2 Section 31 14 11 - Earthwork and Related Work
- .3 Section 01 33 00 - Submittal Procedures

**1.2 STANDARDS**

- .1 ASTM F657-07, Standard Practice for Installation of Chain Link Fence.
- .2 CAN/CGSB-138.1M-97, Fabric for Chain Link Fence.
- .3 CAN/CGSB-138.2M-96, Steel Framework for Chain Link Fence.
- .4 CAN/CGSB-138.3M-96, Installation of Chain Link Fence.
- .5 CAN/CGSB-138.4M-96, Gates for Chain Link Fence.

**1.3 SHOP DRAWINGS**

- .1 Submit Shop Drawings in accordance with Section 01 33 00 Submittal Procedures.

**1.4 CERTIFICATES**

- .1 Submit manufacturer's test data and certification that products and materials meet requirements of this Section and in accordance with Section 01 33 00 Submittal Procedures.

**1.5 HANDLING & STORAGE**

- .1 Handle and store fence materials in such a Storage manner as to avoid damage. Do not damage coatings.

## **PART 2. PRODUCTS**

### **2.1 MATERIALS**

- .1 Posts, rails, and Fittings: to CAN2-138.2-M, schedule 40, galvanized steel.
- .2 Fabric and coating: to CAN2-138.1-M.

## **PART 3. EXECUTION**

### **3.1 GRADING**

- .1 Remove debris and correct ground undulations along fence line to obtain smooth uniform gradient between posts. Provide clearance between bottom of fence and ground surface of 30mm to 50mm.

### **3.2 ERECTION OF FENCE**

- .1 Erect fence along lines as indicated and in accordance with CAN/CGSB-138.3.
- .2 Excavate post holes to dimensions indicated.
- .3 Space line posts 3m apart, measured parallel to ground surface.
- .4 Space straining posts at equal intervals not exceeding 150m if distance between end or corner posts on straight continuous lengths of fence over reasonably smooth grade is greater than 150m.
- .5 Install additional straining posts at sharp changes in grade.
- .6 Install corner post where change in alignment exceeds 10°.
- .7 Install end posts at end of fence and at buildings. Install gateposts on both sides of gate openings.
- .8 Place concrete in post holes then embed posts into concrete to depths indicated. Extend concrete 50mm above ground level and slope to drain away from posts. Brace to hold posts in plumb position and true to alignment and elevation until concrete has set.

- .9 When driving posts directly into the ground or setting posts in bedrock as an approved method, driving depths, diameter of drill hole, grouting compound and the like shall be as specified in the Project Documents.
- .10 Do not install fence fabric until concrete has cured sufficiently. Submit concrete mix to Departmental Representative for review.
- .11 Install brace between end and gate posts and nearest line post, at inclination as indicated. Install braces on both sides of corner and straining posts in similar manner.
- .12 Install overhang tops and caps.
- .13 Install top rail between posts and fasten securely to posts and secure waterproof caps and overhang tops.
- .14 Install bottom tension wire, stretch tightly and fasten securely to end, corner, gate and straining posts with turnbuckles and tension bar bands.
- .15 Lay out fence fabric. Stretch tightly to tension recommended by manufacturer and fasten to end, corner, gate and straining posts with tension bar secured to post with tension bar bands spaced at 300mm intervals. Knuckled selvedge at bottom. Twisted selvedge at top.
- .16 Secure fabric to top rails, line posts and bottom tension wire with tie wires at 450 mm intervals. Give tie wires minimum two twists.
- .17 Install barbed wire strands and clip securely to lugs of each projection where indicated.
- .18 Install grounding rods as indicated.

### 3.3 INSTALLATION OF GATES

- .1 Install gates in locations as indicated.
- .2 Level ground between gate posts and set gate bottom approximately 40mm above ground surface.
- .3 Install gate stops at all gate locations.

### **3.4 TOUCH UP**

- .1 Clean damaged surfaces with wire brush removing loose and cracked coatings. Apply two coats of organic zinc-rich paint to damaged areas. Pretreat damaged surfaces according to manufacturers' instructions for zinc-rich paint.

### **3.5 CLEANING**

- .1 Clean and trim areas disturbed by operations. Dispose of surplus material and replace damaged turf with sod.

**END OF SECTION**