

Approved: 2006-03-31

**Part 1 General**

**1.1 MEASUREMENT AND PAYMENT - GENERAL**

- .1 Payments will be made on the basis of the lump sum prices bid and the unit prices bid in the Tender, and in accordance with the Terms and Conditions of the Contract.
- .2 The prices bid for various items of work, unless specifically noted otherwise, shall include the supply of all labour, material, plant, equipment, profit and overhead necessary to construct the work in accordance with the drawings and specifications.
- .3 The prices bid for supply of materials and installation of materials shall be full compensation of supplying, hauling, installing, cleaning, testing, and placing in service together with all other work subsidiary and incidental thereto for which separate payment is not provided elsewhere.
- .4 The method of measurement of the quantities for payment and the basis for payment will be in accordance with the following items of this section. All measurement will be done by the Contractor using generally accepted field survey methods and will be verified by the Departmental Representative.
- .5 All materials on site whether existing structures, vegetation, topsoil, gravel, sand or other excavated, or piled materials are the property of the Owner or the owner of the land on which the work is located. Only those materials specifically noted in the specification or on drawings as belonging to the Contractor shall become the Contractor's property.
- .6 Where there are excess excavated materials, unsuitable materials excavated or materials of any kind that are excavated but not used in the work, such materials are not the property of the Contractor unless authorized in writing by the Departmental Representative or specified to be disposed of by the Contractor.
- .7 Each unit price shall be the full and only amount payable for the unit and all things directly or indirectly required to complete it in accordance with the contract, such as, but not limited to delivering, erecting, handling, re-handling, storing, consumable items, temporary facilities, scaffolding, protecting, painting, setting out, disposing, clean up, measuring, calculating, scheduling, administration, supervising, inspection, testing, overhead, profit and ancillary/incidental items thereto for which separate payment is not elsewhere provided.
- .8 Each item will be measured for payment in the unit stated in the Schedule of Prices. The unit prices in the Schedule shall remain unchanged notwithstanding differences between the actual quantities and quantities shown herein.
- .9 The items listed in the Schedule of Prices shall, when all considered together, cover the entire Scope of the Work required by the Tender Documents at the time of tendering. The scope of each item is, and shall be, interpreted accordingly.
- .10 Provisional items as identified in the Schedule of Prices are discretionary and will be determined by the Owner if they are to be constructed as part of the work following the award of this Contract.

**Part 2 Measurement and Payment Items**

**2.1 GENERAL REQUIREMENTS**

- .1 This Lump Sum Price will include all costs associated in mobilizing, maintaining and demobilizing the site, required to execute the work including:
  - .1 Specified insurance, equipment, operating overhead, mobilization and demobilization costs required to maintain the workforce on site.
  - .2 Safeguarding work areas including safety program, provision of temporary access roadways, temporary paths, temporary barriers, delineators, barricades, flashing lights, signage, flagmen and other measures required to protect the public from the worksite and to provide access at intersecting streets, including maintenance of such items. Note that fencing and signage protecting the construction site from public access is to be included in General Requirements.
  - .3 Temporary material storage and handling.
  - .4 Maintenance of stockpile and material conditioning sites including restoration.
  - .5 Installation of project signs supplied by Owner.
  - .6 Notification of Alberta First Call and other private sources necessary to obtain all underground utility locations.
  - .7 Location of existing utilities by Hydrovacating or other approved means.
  - .8 Accommodation of vehicle and pedestrian traffic affected by the work, including planning, signage, temporary pavement markings, barricades, traffic control and public notification.
  - .9 Assume role and responsibility of Prime Contractor under the Occupational Health and Safety Act.
  - .10 Construction Survey requirements including all labour, materials and coordination required to complete Construction Surveys for the Project.
  - .11 Materials Testing and Quality Control as specified in Section 01 45 00 - Quality Control.
  - .12 Supply, maintenance and utility costs for field offices as specified in Section 01 52 00 – Construction Facilities.
  - .13 The Contractor’s responsibilities and requirements as outlined in all specification sections which are not included elsewhere.
- .2 Measurement: The Owner will base payment for this lump sum item on a percentage of work completed in dollars.
- .3 Payment: Lump Sum price bid.

**2.2 CARE and CONTROL of WATER/DUST, EROSION AND SEDIMENT CONTROL**

- .1 This lump sum item is to include all costs in providing care and control of dust and water including furnishing, installing and maintaining all pumps, hoses, power sources and related equipment required for dewatering the various parts of the work. Dust, erosion and sediment control shall also include maintaining excavations and foundations and other parts of the work free of water, ice and snow from whatever source. This lump sum item also includes all costs in providing all dust and erosion control requirements of any regulatory agency. The erosion and sediment control measures shall include preparation of an Erosion and Sediment Control Plan (prior to construction and subject to approval by Departmental Representative), supply, and installation of erosion control measures as well as maintenance of the erosion and sediment control measures throughout construction and to issuing of the final acquisition certificate (FAC). This lump sum item also includes protection of adjacent areas outside of the limits of construction from water, run-off, or dust originating within the limits of construction. Payment shall also include removal and disposal of the erosion and sediment control measures at the time of FAC.
- .2 Measurement: Payment for this lump sum item is based on a percentage of work completed in dollars.
- .3 Payment: Lump Sum price bid.

**2.3 TOPSOIL STRIPPING TO STOCKPILE**

- .1 Topsoil Stripping and Stockpiling: the price shall be full compensation for stripping, loading and stockpiling of excavated topsoil and maintaining stockpiles for the duration of construction.
- .2 Measurement: Cubic metres determined by survey of stockpile cross-sections after stripping.
- .3 Payment: Unit rate price per cubic meter to strip and stockpile on site, which shall be full compensation for all the labour, materials and equipment necessary to complete the work.

**2.4 ROUGH GRADING**

- .1 Rough Grading will include excavation of all existing materials to the design grade elevations required within the construction area. Excavated materials will be utilized on-site for embankment fill material where necessary and compacted to 98% determined by Standard Proctor Density at +/-2% of optimum moisture content. The Unit Price shall be full compensation for excavation to grade, loading, hauling, stockpiling, re-hauling, placing, spreading, moisture conditioning, compacting, and final trimming to sub-grade elevations. There shall be no additional compensation for overhaul.
- .2 Measurement: Cubic metres determined by survey of stockpile cross-sections before and after placement.
- .3 Payment: Unit price bid per cubic meter placed which shall be full compensation for all labour, materials, and equipment necessary to complete the work.

## **2.5 SUBGRADE PREPARATION**

- .1 The Unit Price for subgrade preparation shall be full compensation for excavation, temporary stockpiling and double handling, scarifying, mixing, moisture conditioning rolling, spreading, shaping and compacting to the specified depths and density.
- .2 Measurement: Field measured in horizontal square metres of the subgrade preparation neat line areas before granular sub-base placement. No payment will be made for subgrade preparation completed outside the specified limits.
- .3 Payment: Unit price bid per horizontal square meter which shall be full compensation for all labour, materials, and equipment necessary to complete the work.

## **2.6 PLACEMENT OF STOCKPILED TOPSOIL**

- .1 The Unit Price shall be full compensation for final placement of stockpiled topsoil. Price includes loading, hauling, spreading, trimming and shaping to the depth specified.
- .2 Measurement: Cubic metres determined by survey of stockpile cross-sections before and after placement.
- .3 Payment: Unit price bid per cubic meter placed which shall be full compensation for all labour, materials, and equipment necessary to complete the work.

## **2.7 CRUSHED GRANULAR SUB-BASE AND CRUSHED GRANULAR BASE COURSE**

- .1 Unit prices for crushed granular subbase course and crushed granular base course shall include supplying, hauling, handling, placing, spreading, mixing, ploughing, compacting, drying or adding water, fine grading, draining water, repairing base damaged by rain or excessive machinery traffic and any other ancillary work to comply with the requirements of the drawings and specifications.
- .2 Measurement: Measured in horizontal square meters of material compacted in place, as measured at the top surface neat line of each material. No payment shall be made for overbuild beyond the neat lines of the design template.
- .3 Payment: Unit price bid per horizontal square meter which shall be full compensation for all labour, materials, and equipment necessary to complete the work.

## **2.8 ASPHALTIC CONCRETE – TYPE II and III**

- .1 Asphaltic plant mix shall include the preparation of the job mix design and job mix formula, the supply and placing of a prime coat and tack coat as required, supply of aggregates and asphalt, mixing, transporting, laying and compacting the surface course to the specified grade, thickness and density. This item shall also include the adjustment of all utility structures, unless measured and paid for separately, and clean-up.
- .2 Measurement: Measured in horizontal square metres to neat line of the finished asphaltic concrete surface (excluding side slopes). No payment will be made for asphaltic concrete installed outside the specified limits or bonus for asphalt compaction.
- .3 Payment: Unit price bid per horizontal square meter which shall be full compensation for all labour, materials, and equipment necessary to complete the work.

**2.9 CONCRETE CURBING**

- .1 The Unit Price shall be full compensation for base preparation and compaction, formwork, supply and placing of concrete, jointing, reinforcing, benching, finishing, curing, sealing, equipment required, backfilling, final compaction and all other ancillary work items associated with the construction of each specified size of curbing.
- .2 Measurement: Field measured in lineal metre of specified size of curbing in accordance with project drawings and specifications.
- .3 Payment: Unit price bid per lineal meter which shall be full compensation for all labour, materials, and equipment necessary to complete the work.

**2.10 CONCRETE PAVING**

- .1 The Unit Price shall be full compensation for base preparation and compaction, formwork, supply and placing of concrete, jointing, reinforcing, benching, finishing, curing, sealing, equipment required, backfilling, final compaction and all other ancillary work items associated with the construction of each specified size of concrete paving.
- .2 Measurement: Field measured in square metres of specified size of area concrete in accordance with project drawings and specifications.
- .3 Payment: Unit price bid per square metre which shall be full compensation for all labour, materials, and equipment necessary to complete the work.

**2.11 CONCRETE PAVING STONE**

- .1 The Unit Price shall be full compensation for the supply and installation of all materials, equipment, labour and other associated incidental work in completion of work in accordance with the drawings.
- .2 Measurement: Field measured in square metres of specified size of area concrete in accordance with project drawings and specifications.
- .3 Payment: Unit price bid per square metre which shall be full compensation for all labour materials, and equipment necessary to complete the work.

**2.12 PLANTING**

- .1 Planting shall include the installation of all trees, shrubs, perennials, staking and any ancillary / incidental related work, in accordance with the project drawings and specifications. All plant materials shall be guaranteed by the Contractor until the Final Warranty Inspection.
- .2 Measurement: Field count per unit.
- .3 Payment: Unit price per tree or shrub.

**2.13 BARK MULCH**

- .1 The Unit Price shall be full compensation for the supply of all labour, materials and equipment for the installation of the bark mulch, as detailed, including excavation and trimming, placement and anchoring of filter fabric, placement of bark mulch, final shaping of bark mulch, disposal of excess materials and clean-up.
- .2 Measurement: Field measurement of cubic meters of mulch in place after installation.

- .3 Payment: Unit price bid per cubic metre.

**2.14 DECORATIVE ROCK MULCH**

- .1 The Unit Price shall be full compensation for the supply of all labour, materials and equipment for the installation of the decorative rock mulch, as detailed, including excavation and trimming, placement and anchoring of filter fabric, placement of decorative rock mulch, final shaping of decorative rock mulch, disposal of excess materials and clean-up.
- .2 Measurement: Field measurement of cubic meters of mulch in place after installation.
- .3 Payment: Unit price bid per cubic metre.

**2.15 FESCUE SODDING**

- .1 Measurement: Field measured in horizontal square metres of areas sodded with Fescue Sod after topsoil placement, in accordance with the project drawings and specifications. No payment will be made for sodding completed outside the specified limits.
- .2 Payment: Unit price bid per horizontal square meter which shall be full compensation for all labour, materials, and equipment necessary to complete the work.

**2.16 SEEDING WITH HYDROMULCH – NATIVE SEED MIX**

- .1 Measurement: Field measured in horizontal square metres of areas seeded with native seed mix after topsoil placement, in accordance with the project drawings and specifications. No payment will be made for seeding completed outside the specified limits.
- .2 Payment: Unit price bid per horizontal square meter which shall be full compensation for all labour, materials, and equipment necessary to complete the work.

**2.17 IRRIGATION MAINLINE c/w TURF VALVES**

- .1 The lineal meter price shall be full compensation for the supply and installation of 25mm medium density polyethylene pipe, in accordance with the project drawings and specifications. The lineal meter price shall include the excavation, bedding, back fill and compaction.
- .2 Measurement: Measured in lineal meters of main line installed.
- .3 Payment: Unit rate price bid per lineal meter of main line installed.

**2.18 CHAIN LINK FENCING**

- .1 The unit price shall be full compensation for the supply of all labour, materials and equipment for the complete installation of black vinyl chain link fencing in accordance with drawings and specifications, including pedestrian and vehicular gates.
- .2 Measurement: Measured in lineal meters along the face of the fence.
- .3 Payment: Unit price bid per lineal meter of fencing installed.

**2.19 TOPLESS GLASS RAILING FENCING**

- .1 The unit price shall be full compensation for the supply of all labour, materials and equipment for the complete installation of Glass Railing System in accordance with drawings, specifications and manufactures recommendations.
- .2 Measurement: Measured in lineal meters along the face of the fence.
- .3 Payment: Unit price bid per lineal meter of fencing installed.

**2.20 ELECTRICAL**

- .1 The lump sum price shall be full compensation for the supply of all labour, materials and equipment for the complete installation of the LED lighting system and all ancillary electrical work items.
- .2 Measurement: Full payment shall be made once all of the electrical work items are completely installed.
- .3 Payment: Lump sum price bid.

**2.21 RELOCATE – EXISITNG GRANDSTAND AND MEMORIAL BENCHES**

- .1 This unit price shall be full compensation for relocation of the existing grandstand tent memorial benches, and other specified elements, which are currently located on site, in accordance with project drawings and specifications, including preparation, removal, and re-installation.
- .2 Measurement: Full payment shall be made once the grandstand tent, memorial benches, and other elements have all been relocated.
- .3 Payment: Lump sum price bid.

**END OF SECTION**