

1.0 GENERAL

1.1 Related Work

.1 Coordinate the requirements of this section with all other sections, including but not limited to:

.1 Section 02212 Topsoil

1.2 Quality Control

.1 **City of Prince Albert, Public Works** to approve rough grading and sub grade preparation for all Work.

.1 Notification is required when unsuitable or waste material is encountered during rough grading operations.

1.3 Measurement and Payment

.1 The Lump Sum and Unit prices submitted are for supply of all labour and equipment and materials as specified or required to complete the Work as intended.

.2 The prices submitted to be full compensation for supplying (if applicable), hauling, installing, cleaning and placing in service the Work as specified and detailed, together with all incidental Work.

.3 Measurement for Payments to be calculated on the basis of a percentage of completion of the Lump Sum and Unit prices for the applicable item of Work or at Unit rates of Force Account Rates as entered on the Tender Form.

.4 Rough Grading includes all associated costs for excavation, grading to design sub grade elevations, disposal of material, aeration, adding water and compaction for all applicable surface treatments.

.1 Quantities refer to material after compaction.

.5 Imported Fill (cu. m.) includes all associated costs for sub grade preparation of areas to be rough graded.

1.4 Inspections

.1 Notify **Consultant** for inspection of:

.1 Rough grading, prior to placement of topsoil or soil mixes for:

.1 Berms, swales, and all turf areas.

1.5 TESTING

- .1 Rough grading and sub grade preparation for all surface treatments excluding asphalt may be subject to compaction tests by an approved testing laboratory service.

2.0 PRODUCTS

2.1 Materials

- .1 Existing On Site Fill Material: clean subsoil material for rough grading, **containing no organic matter, waste material or other unsuitable material** deemed to be detrimental to construction of rough grade.
 - .1 Topsoil is acceptable fill material within soft landscape areas.
- .2 Imported Fill Material: clean subsoil material, as approved for rough grading, **containing no organic matter, waste material or other unsuitable material** deemed to be detrimental to construction of rough grade.
- .3 Waste materials found on site which are deemed to be unsuitable for fill, grading or landscaping. Waste material includes:
 - .1 Soil containing spongy or yielding material, organic material, frozen materials, wet or saturated materials, toxic materials, alkaline material, and other unsuitable materials.

3.0 EXECUTION

3.1 Preparation

- .1 Remove weeds, stones, debris, and other foreign material in excess of 50mm diameter prior to start of Work.

3.2 Layout

- .1 Establish and maintain line and grade controls using appropriate survey personnel and equipment.
 - .1 Contractor is responsible for layout accuracy.
 - .2 Check surface grades constantly as Work proceeds.
 - .3 Normal tolerance will be +/- 25 mm, except where greater accuracy is specified.

3.3 Rough Grading

- .1 Scarify surface of existing ground to depth of 150 mm prior to start of rough grading operations.
- .2 Rough grade to sub grade elevations. Ensure some moisture content between existing ground and graded material to facilitate bonding.
 - .1 Burying of waste material or unsuitable material is prohibited.
- .3 Rough grade to designed sub grades per drawings, allowing for the depths required for hard and soft landscape surface treatments.
- .4 Backfill areas over excavated below design sub grade with selected material or granular backfill.
- .5 Compact the sub grade to Standard Proctor, ASTM D-698.
 - .1 If soil is too moist, dry top 300mm by aeration to optimum moisture content.
 - .2 If the soil is too dry, add water uniformly with a pressure water sprayer to achieve optimum moisture content.
 - .3 Use sheeps foot type roller or other equipment to achieve compaction.
 - .4 Do not over compact the sub grade for the use intended.
- .6 Compact sub grade to the following densities:
 - .1 Turf areas 85%
 - .2 Unit Paving, Concrete and Asphalt areas 97%
- .7 Eliminate uneven or low areas, ensuring positive drainage.
 - .1 Re-grade areas damaged during construction of other Work.

3.4 Clean-Up

- .1 Remove and dispose of excess material, waste material and surface debris.
- .2 Clean adjacent walks and road surfaces at the end of each working day.

END OF SECTION