

PART I - GENERAL

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| <u>1.1 Related Work</u> | .1 | Site Protection | : | Section 02104 |
| | .2 | Site Clearing and Disposal | : | Section 02111 |
| | .3 | Topsoil and Finish Grading | : | Section 02212 |
| <u>1.2 Scope of Work</u> | .1 | This section specifies the work required to grade the site within the tolerances for finished surfaces. | | |
| | .2 | Coordinate work in this section with work in all other sections. | | |
| <u>1.3 Site Condition</u> | .1 | Known underground sewer and utility lines are indicated on site plan. The Contractor is to establish location before commencing any excavation or boring work. | | |
| | | The contractor shall obtain clearance from the appropriate agencies prior to commencing work for all other buried services (Refer to Section 01005, General Requirements Item 1.13). Submit copies of all stakeout reports/ sheets to the Community Services Department. | | |
| | .2 | The contractor is responsible for providing all site layout required for the execution of the work including grade stakes indicating cut and fill on the site. | | |
| <u>1.4 Protection</u> | .1 | Prevent damage to existing trees and grassed areas, existing pavement, surface or underground utility lines which are to remain. Make good any damage. | | |

PART II - PRODUCTS

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| <u>2.1 Materials</u> | .1 | Rough grading shall include the use of existing material on site. When on site material is deficient, the contractor shall be required to import fill in order to achieve the proposed grading. Refer to Section 01005, General Requirements Item 1.6.4 and Item .2 listed below for information regarding importing material. | | |
| | .2 | Use imported clean earth fill that has been inspected and | | |

approved by the City. Earth fill must be of a sandy type and free of debris, organic materials, rocks larger than 25 mm in diameter, and free of all toxins that may inhibit growth of trees and sod. State source of fill and submit test results from an independent lab, verifying that the fill is free of toxins prior to obtaining approval from the Community Services Department.

- .3 Excavated or graded material is to be approved by the Community Services Department before use as fill. Protect such approved material from contamination.
- .4 Contaminated fill or debris shall be removed from the site at the contractor's expense.

PART III - EXECUTION

3.1 Removal of Topsoil

- .1 Strip topsoil to its full natural depth from areas to receive new paving and grading adjustments. Strip topsoil when dry enough to prevent contamination with sub-grade material. Topsoil shall not be considered surplus and will be re-used when it is approved by the City of Mississauga. Refer to Topsoil and Finish Grading: Section 02212.
- .2 Do not handle topsoil in wet or frozen condition.
- .3 Stockpile topsoil on site where directed, for re-use on this project. Stockpile in layers not exceeding 250 mm in depth. Maximum height of stockpiles not to exceed 4.5 m. Maximum slope of stockpiles not to exceed side slope of 2:1.
- .4 Any soil or fill storage piles shall not be located within a downslope area within ten metres to a roadway or drainage channel.

3.2 Grading

- .1 Do all necessary rough grading and compacting to establish the sub-grade 150mm below the finished grade shown on the grading plan.
- .2 Prior to placing fill over ground where raising of grade is required, scarify surface to depth of 75 mm. Maintain fill and existing surface at approximately same moisture content to facilitate bonding.

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- .3 Do not disturb soil within branch spread of trees or shrubs to remain. Refer to Section 02104, Site Protection.
 - .4 Leave no debris, boulders, roots, plant material or other foreign materials at graded surfaces.
 - .5 Place fill in layers of 150 mm maximum, and compact each to specified compaction density before placing next layer.
 - .6 Compact filled and disturbed areas to Standard Proctor Density to ASTM D698-78 as follows :
 - .1 85% under areas to be grassed
 - .2 98% under areas to be paved
 - .7 Establish sub-grade parallel to finished grade and shape to permit drainage.
 - .8 Establish uniform slopes between points for which finished grades are indicated on the drawings or between such points and existing grades. Round and smooth grades at top and toe of slopes and banks. Make all grade transitions smooth and consistent.
 - .9 Avoid ponding or flooding of the sub-grade by providing temporary relief swales or ditches, as necessary.
 - .10 Obtain the Community Services Department's approval of finished sub-grade prior to commencing any other work including placing of topsoil, pea gravel, sand, topsoil and any other material required for the next stage of construction.
- 3.3 Surplus Material
- .1 Do all necessary excavation and haulage of excess fill material, debris and material unsuitable for fill to the designated dump site.
 - .2 The contractor shall comply with the requirements of the MOE, MTO, the City of Mississauga, the applicable Conservation Authority, the engineer and any other authority having jurisdiction and will be responsible for any damage to the streets used as a haul road.

END OF SECTION 02211