

PART 1 – GENERAL

1.1 RELATED SECTIONS

- .1 Section 31 11 00 Clearing and Grubbing
- .2 Section 31 23 10 – Excavating, Trenching and Backfilling

1.2 REFERENCES

- .1 American Society for Testing and Materials (ASTM)
 - .1 ASTM D698 91(1998), Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort (600 kN m/m). Existing conditions.
- .2 Refer to de-watering paragraph in Section 31 23 10 Excavating, Trenching and Backfilling.

1.3 PROTECTION

- .1 Protect trees, fencing, landscaping, natural features, hard coverings, buried or exposed utility lines to remain in place in accordance with instructions of NCC Representative. Unless otherwise instructed, repair damaged features and restore to original or better condition.

PART 2 – PRODUCTS

2.1 MATERIALS

- .1 Fill: Type 2, to limits specified when tested to ASTM C136 and ASTM C117. Sieve sizes to CAN/CGSB-8.1
- .2 Backfill: Type 1, to OPSS 1010.
- .3 Fill from excavation or grading work **may not be used** on site as backfill. ~~if approved by NCC Representative.~~

PART 3 – EXECUTION

3.1 GRADING

- .1 Rough grade to levels, contours and profiles indicated, given the type of surface treatment.
- .2 Rough grade to depths required to establish subgrade level under finished surfaces as shown in construction details.
- .3 Areas to be backfilled to be free from debris, snow, ice, water and frozen ground.
- .4 Do not use backfill material which is frozen or contains ice, snow or debris.
- .5 Before placing backfill material, work soil surface to 150 mm. To facilitate bonding, keep backfill materials and existing surface at approximately same moisture level.
- .6 Compact disturbed surfaces and filled surfaces to the maximum dry density specified in ASTM D698, i.e.:
 - .1 85% under landscaping.

- .2 95% under paved surfaces and trails.
- .7 Do not disturb existing soil in protection zones of trees or shrubs to remain except where necessary for shrub and perennial planting beds, to a maximum of 100 mm in existing soil.

3.2 TESTING

- .1 Compaction inspections and testing to be performed by laboratory designated by NCC.
~~Contractor~~ **NCC** shall pay testing costs.

3.3 SURPLUS MATERIALS

- .1 Remove surplus materials and material unsuitable for backfilling, grading or landscaping off site.

END OF SECTION