

Part 1 General

1.1 RELATED SECTIONS

- .1 Section 01 74 21 – Construction/Demolition Waste Management and Disposal.
- .2 Section 01 29 83 - Payment Procedures for Testing Laboratory Services
- .3 Sections 01 45 00 - Quality Control
- .4 Section 02 41 16.01 – Structure Demolition

1.2 SECTION INCLUDES

- .1 This section specifies the requirements for:
 - .1 Excavation and backfilling for site work and site grading.

1.3 REFERENCES

- .1 American Society for Testing and Materials (ASTM)
 - .1 ASTM D698-07e1, Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort.

1.4 EXISTING CONDITIONS

- .1 Known underground and surface utility lines and buried objects are as indicated on site plan.
- .2 Examine all drawings and specifications to ascertain the extent of the work. Visit the site to ascertain special conditions which might affect the work of this section.

1.5 PROTECTION

- .1 Protect and/or transplant existing fencing, landscaping, natural features, bench marks, buildings, surface or underground utility lines which are to remain as directed by Departmental Representative. If damaged, restore to original or better condition unless directed otherwise.
- .2 Maintain adjacent roads to prevent accumulation of construction related debris on roads.

1.6 MEASUREMENT FOR PAYMENT

- .1 Rock and gravel backfill including supply, placement and compaction to be measured in cubic meters in place (CMPM).

- .2 Excavated materials will be measured in cubic meters (CMPM) in their original position. Any excavated material deemed suitable for re-use by Departmental Representative shall be placed at another location on site at no extra cost.

Part 2 Products

2.1 MATERIALS

- .1 Backfill material: Type 3 with gradation to be within limits specified when tested to ASTM C136 (latest edition) and ASTM C117 (latest edition). Sieve sizes to CAN/CGSB-8.1 (latest edition).

<u>Sieve Designation</u>	<u>%</u>
Passing 200 mm	100
150 mm	80-100
80 mm	55-95
30 mm	25-65
5 mm	5-25
1 mm	0-10
0.08	mm 0-5

- .2 Excavated or graded material existing on site may be suitable to use as fill for grading work if approved by Departmental Representative.
- .3 Armour stone to be distributed and / or placed on existing breakwater or used on site as directed by Departmental Representative.

2.2 STOCKPILING

- .1 Stockpile granular backfill material in manner to prevent segregation. Protect stockpiled fill material from freezing.

Part 3 Execution

3.1 GRADING

- .1 Rough grade to levels, profiles, and contours allowing for surface treatment as indicated.
- .2 Compact filled and disturbed areas to 95% corrected maximum dry density to ASTM D698.

3.2 TESTING

- .1 Costs of tests will be paid by Departmental Representative. Refer to Sections 01 29 83 - Payment Procedures for Testing Laboratory Services and 01 45 00 - Quality Control.

3.3 BACKFILLING

- .1 Do not commence backfilling until areas of work to be backfilled have been inspected and approved by Departmental Representative.
- .2 Areas to be backfilled to be free from debris, snow, ice, water and frozen ground.
- .3 Place fill materials in 300 mm lifts and compact to 95% corrected maximum dry density.

3.4 SURPLUS MATERIAL

- .1 Remove surplus material and material unsuitable for fill, grading or landscaping as directed by Departmental Representative.

END OF SECTION