

Part 1 General

1.1 RELATED SECTIONS

- .1 Section 31 32 21 - Geotextiles.
- .2 Section 31 32 22 - Geomembranes.
- .3 Section 31 05 17 - Aggregate Materials.
- .4 Section 01 74 11 - Cleaning

1.2 REFERENCES

- .1 American Society for Testing and Materials (ASTM)
 - .1 ASTM C117-13, Standard Test Method for Materials Finer than 0.075 mm Sieve in Mineral Aggregates by Washing.
 - .2 ASTM C136-06, Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates.
 - .3 ASTM D698-12a, Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort 600kN-m/m³.
- .2 Canadian General Standards Board (CGSB)
 - .1 CAN/CGSB-8.1-88, Sieves, Testing, Woven Wire.
 - .2 CAN/CGSB-8.2-M88, Sieves, Testing, Woven Wire, Metric.

1.3 SHOP DRAWINGS

- .1 Indicate following items:
 - .1 Liner panels, details of anchoring panels, material, thickness and reinforcement.
 - .2 Projections through liner and method of sealing.
 - .3 Piping.

1.4 SAMPLES

- .1 Submit to Engineer for testing, samples of following materials at least 4 weeks prior to commencing work:
 - .1 Two samples 3600 mm square of flexible lining including joint or intersecting joints if included in Work.
 - .2 Two samples 600 mm long of flexible lining including joint or intersecting joints if included in Work.

1.5 WASTE MANAGEMENT AND DISPOSAL

- .1 Divert unused aggregate materials from landfill to facility for reuse as approved by Engineer.

- .2 Divert unused geotextiles from landfill to plastic recycling facility for disposal as approved by Engineer.

Part 2 Products

2.1 MATERIALS

- .1 Flexible liner: geomembrane in accordance with Section 31 32 22 - Geomembranes.
- .2 Geotextiles: in accordance with Section 31 32 21 - Geotextiles.
- .3 Rip-rap: in accordance with Section 31 37 17 - Rip-Rap.
- .4 Berm material in accordance with Section 31 05 17 – Type C material.

Part 3 Execution

3.1 EXCAVATION

- .1 Excavate effluent ditches, by-pass ditches or re-routed surface drainage ditches as directed by Engineer.
- .2 Remove unsuitable materials from dyke foundation to depth as indicated by Engineer.

3.2 DYKE CONSTRUCTION

- .1 Construct dykes as indicated.
- .2 Place dyke material in unfrozen condition.
- .3 Place dyke materials in layers of 300 mm loose thickness. Compact each layer to 95% maximum density to ASTM D698.
- .4 Moisture content of dyke material to be within optimum moisture content and 3 percent above optimum moisture content. Material with moisture content below optimum will be rejected.
- .5 Hand finish or grade slopes and top of completed dyke to remove stones over 25 mm in size and other debris.
- .6 Finish slopes and top of dyke as indicated.
- .7 Rip-rap areas indicated in accordance with Section 31 37 17 - Rip-Rap.

3.3 GEOMEMBRANES

- .1 Place geomembrane in accordance with Section 31 32 22 as outlined in manufacturer's recommendation.

3.4 GEOTEXTILES

- .1 Place geotextiles in accordance with Section 31 32 21 - Geotextiles as outlined I manufacturer's recommendations.

3.5 RIP-RAP

- .1 Place rip-rap in accordance with Section 31 37 17 - Rip-Rap and as indicated.

3.6 CLEAN UP

- .1 Remove surplus material and debris from site in accordance with Section 01 74 11 - Cleaning

END OF SECTION