Coordinate with Geotechnical Engineer for requirements and use. Modify 2-year pond elevation.

1. Clay Liner Pond (Location), Item SPV.0060.##

A Description

This special provision describes providing clay liners in the bottom and side slopes of wet detention ponds as the plans show.

Geotechnical reports and Wisconsin Department of Natural Resources Wet Detention Basin Standard (Code 1001) shall be used for construction guidance:

<https://dnr.wi.gov/topic/stormwater/documents/WetPondStd1001.pdf>

B Materials

Clay liner shall meet specifications of a Type A Liner as set forth in Wisconsin Department of Natural Resources Wet Detention Basin Standard (Code 1001), Appendix D. Clay liner shall have the following properties:

- Minimum liner thickness of two feet

- Liner shall extend up the side slope to the 2-year pond elevation of 753.3 feet

- 50% fines (200) sieve or more

- In-place hydraulic conductivity of 1x10-7 cm/sec, or less

- Average liquid limit of 25 or greater, with no value less than 20

- Average PI of 12 or more, with no values less than 10

- Clay installed wet of optimum if using standard Proctor, and 2% wet of optimum if using modified Proctor

- Marsh excavation is not allowed

In-situ material per Code 1001, Appendix D, is acceptable as a liner if permeability of 1x10-7 cm/sec or less is measured and certified 3 feet below pond bottom.

C Construction

Construct clay liner according to WDNR Conservation Practice Standard 1001 (Wet Detention Pond), Appendix D for Type A Liners. Compact clay and document as specified in NRCS Wisconsin Construction Specification 300, Clay Liners.

Tie the liner material together with any previously constructed anti-seep collars around pipe drains connected at the pond.

A qualified Geotechnical engineer shall certify in writing the pond liner system and embankments are in conformance with the Type A Liner specifications. Use of in-situ material also requires certification by Geotechnical engineer.

D Measurement

The department will measure Clay Liner Pond (Location) as a single EACH item acceptably completed.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER DESCRIPTION UNIT

SPV.0060.## Clay Liner Pond (Location) EACH

Payment is full compensation for furnishing material; for placing, compacting, finishing and shaping the clay liner; for disposing of surplus materials; for any dewatering; for all certification and testing.

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