ITEM 616.20----08 BIORETENTION AND DRY SWALE SOIL

DESCRIPTION
This work shall consist of furnishing and installing Bioretention and Dry Swale Soil in accordance with the contract documents and as directed by the Engineer.

MATERIALS
The soil for Bioretention areas and Dry Swales shall be a uniform mix, free of stones, stumps, roots or other similar objects larger than 25mm in diameter. No other materials or substances shall be mixed or dumped within the Bioretention area and Dry Swale that may be harmful to plant growth, or prove a hindrance to planting or maintenance operations. The Bioretention and Dry Swale soil shall be visibly free of noxious weeds.

Bioretention and dry swale soil shall meet the following characteristics:

Parameter	Characteristic
PH Range	5.2 to 7.0
Organic Content	1.5 to 4.0% by dry weight
Magnesium	4.0g/m^2 minimum
Phosphorous	8.5g/m^2 minimum
Potassium	9.5g/m^2 minimum
Soluble Salts	$\leq$ 500ppm
Percent soil finer than 0.002mm	0 to 10%
Percent soil passing no. 200 (0.075mm) sieve	0 to 40%
Percent soil passing no. 10 (2.00mm) sieve	100%

Acceptance of Bioretention and Dry Swale soil will be based upon the test results unless otherwise specified.

TESTING
Material tests are required by this specification will be done by the Department in conformance with the procedures contained in the appropriate publications for test methods current on the date of advertisement for bids. Bioretention and Dry Swale soil sampling shall follow the sampling procedure for stockpiled Topsoil described in MURK 1B, Construction Inspection Manual, Section 713, with the exception that the "Topsoil Documentation Form" cannot be used for Bioretention and Dry Swale Soil. In lieu of the "Topsoil Documentation Form" the "Bioretention and Dry Swale Soil Documentation Form" contained in this specification shall be used.

CONSTRUCTION DETAILS
Bioretention and Dry Swale Soil shall be furnished and placed at the locations and to the depth as shown in the contract plans. Placement of Bioretention and Dry Swale Soil shall be done in lifts of 300mm to 450mm. The soil shall be loosely compacted by tamping lightly with a dozer or backhoe bucket.

ITEM 616.20----08 BIORETENTION AND DRY SWALE SOIL

METHOD OF MEASUREMENT

This work will be measured as the number of cubic meters of Bioretention and Dry Swale Soil satisfactorily furnished and installed.

BASIS OF PAYMENT

The unit price bid shall include the cost of furnishing all labor, materials, and equipment necessary to satisfactorily complete the work.

BIORETENTION & DRY SWALE SOIL DOCUMENTATION FORM

SECTION A

PROJECT IDENTIFICATION	STOCKPILE DATA
Contract No. : _____ P.I.N. : _____	Location: _____ _____ _____
Contract Quantity _____cubic meters	Remarks: _____ _____ _____
County _____	Item No. _____
Region _____	Stockpile Quantity Cubic Meters _____

SAMPLED BY:
NAME: _____ TITLE: _____ DATE: _____

SECTION B

TEST RESULTS				
Regional Sample No.				
G.E.B. Lab No.				
PH				
% Organic Content				
g/m^2 Magnesium				
g/m^2 Phosphorous				
g/m^2 Potassium				
ppm Soluble Salts				
% finer than 0.002mm				
% Passing no. 200 sieve				
% Passing no. 10 sieve				

Tested by:_____ Title _____ Date:_____
Checked by:_____ Title_____ Date:_____
GEB Results Approval:_____ Title _____ Date: _____

SECTION C

APPROVAL: The test results indicate that the material represented by this sample(s) numbered _____ meets the quality requirements specified for Bioretention & Dry Swale Soil on the project identified above, and is acceptable for use subject to the following conditions:

_____
_____

NAME:_____ TITLE: _____ DATE:_____

REJECTION: The test results indicate that the material form this stockpile is not acceptable for use as Bioretention & Dry Swale Soil.

NAME:_____ TITLE: _____ DATE:_____

INSTRUCTIONS:

ORIGINATOR -
Complete Section A
Retain one copy
Submit one copy with sample to:
NYS DOT Labs
Attn: General Soils Laboratory
50 Wolf Road, Albany, N.Y. 12232

GEOTECHNICAL BUREAU-
Complete Section B
Mail form to:
Regional Landscape Architect
at Region shown

REGIONAL LANDSCAPE ARCHITECT-
Complete Section C
Retain one copy of the form
Forward one copy to the E.I.C.