



Albert Frick Associates, Inc

Environmental Consultants

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February 9, 2016

Mr. Travis Letellier, P.E.
Northeast Civil Solutions
381 Payne Road
Scarborough, ME 04074

Re: Dollar General site, 1034 Western Avenue, Manchester

Dear Mr. Letellier,

As requested, I revisited the above-referenced site on February 8, 2016 to observe and classify soils for a proposed forested buffer for the proposed project.

Enclosed for your review and use are a sketch plan of the test pit site, along with a soil profile description of the soil observed.

The soils at TP A consist of moderately well-drained Nicholville, which is lacustrine in origin and comprised of fine sandy loam underlain by loamy fine sand and silt in lenses. This soil is a hydrologic Group C soil. A general soil description is also enclosed for your use.

I trust you will find this and the enclosed information helpful in the appropriate stormwater design for the project. Otherwise, feel free to call should you have any questions or additional matters for discussion regarding the site.

Sincerely,

James Logan
Senior Project Manager
Certified Soil Scientist # 213
Licensed Site Evaluator # 237
USACE Certified Wetland Delineator

JL/bo

Town, City, Plantation
MANCHESTER

Street, Road Subdivision
1034 ROUTE 202

(FOR) Owner's Name
NCS/GBT REALTY

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP A Test Pit Boring
" Depth of Organic Horizon Above Mineral Soil

Texture	Consistency	Color	Mottling
0		DARK BROWN	
FINE SANDY LOAM		DARK	
10	FRIBLE	YELLOWISH BROWN	
LOAMY FINE SAND		LT. OL. BR.	FAUFAINT
20	SOMEWHAT FIRM	OLIVE	COMMON
30	TO FIRM		DISTINCT
40	IN LENSES		
50	LENSES		

Soil Classification: Profile B Condition C Slope 15% Limiting Factor 15"

Ground Water Restrictive Layer Bedrock Pit Depth

Soil Series Name: NICHOLVILLE Drainage Class: MWD Hydrologic Group: C

FOR WASTEWATER DISPOSAL

FOR SOILS MAPPING

Observation Hole _____ Test Pit Boring
" Depth of Organic Horizon Above Mineral Soil

Texture	Consistency	Color	Mottling
0			
10			
20			
30			
40			
50			

Soil Classification: Profile _____ Condition _____ Slope _____% Limiting Factor _____"

Ground Water Restrictive Layer Bedrock Pit Depth

Soil Series Name: _____ Drainage Class: _____ Hydrologic Group: _____

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole _____ Test Pit Boring
" Depth of Organic Horizon Above Mineral Soil

Texture	Consistency	Color	Mottling
0			
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20			
30			
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50			

Soil Classification: Profile _____ Condition _____ Slope _____% Limiting Factor _____"

Ground Water Restrictive Layer Bedrock Pit Depth

Soil Series Name: _____ Drainage Class: _____ Hydrologic Group: _____

FOR WASTEWATER DISPOSAL

FOR SOILS MAPPING

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Ground Water Restrictive Layer Bedrock Pit Depth

Soil Series Name: _____ Drainage Class: _____ Hydrologic Group: _____

James Logan

237/213

2/8/16

NICHOLVILLE (Aquic Haplorthods)

SETTING

Parent Material:	Lacustrine material having a high content of silt and fine sand.
Landform:	Commonly found on lake plains and upland till plains that have a mantle of water-deposited silt or very fine sand.
Position in Landscape:	Intermediate and upper portions of landscape feature.
Slope Gradient Ranges:	(B) 3-8% (C) 8-20% (D) 20+%

COMPOSITION AND SOIL CHARACTERISTICS

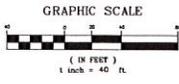
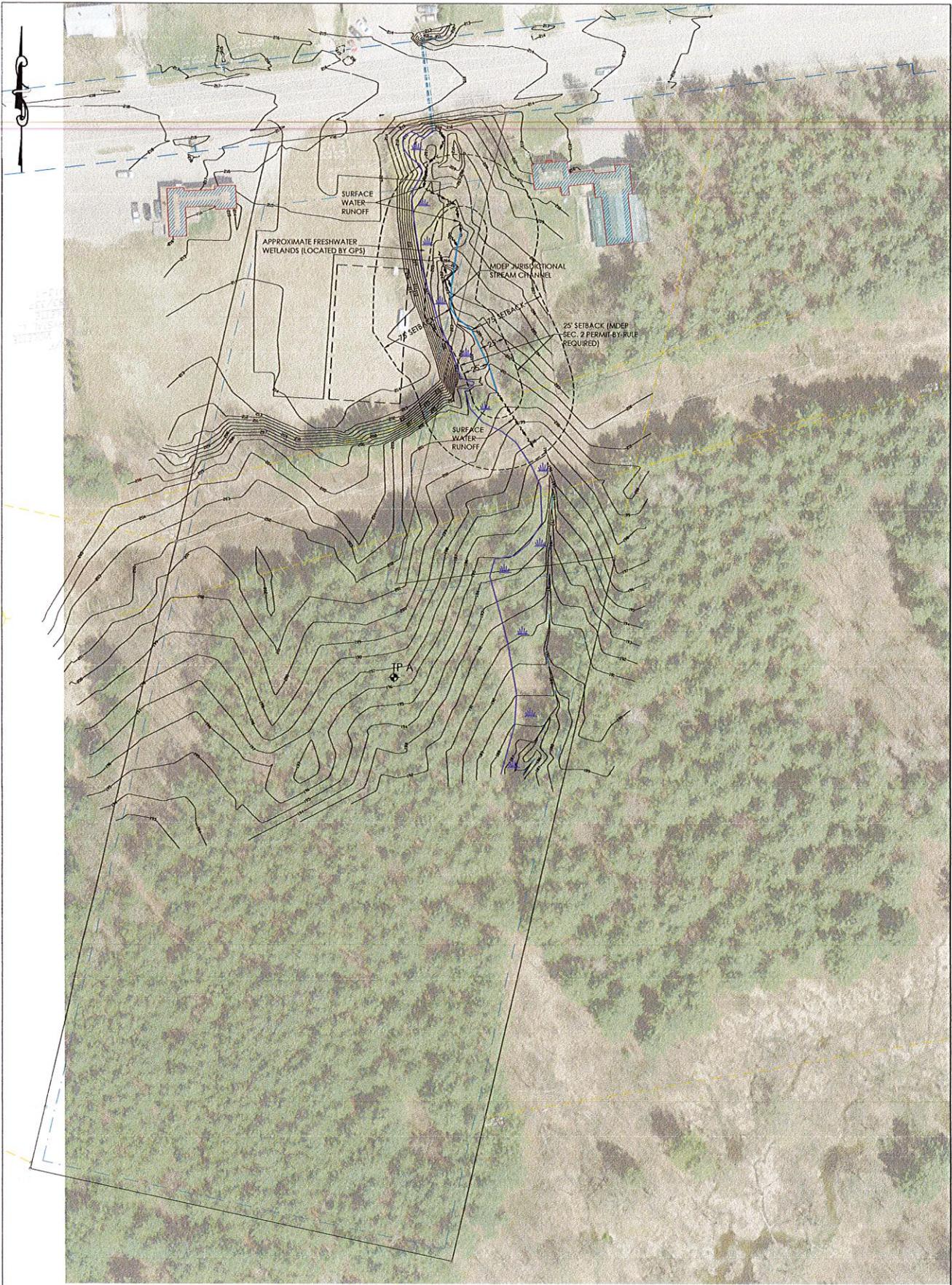
Drainage Class:	Moderately well drained, with a perched water table 1.5 to 2.0 feet below the soil surface from November through May.								
Typical Profile Description:	<table><tr><td>Surface layer:</td><td>Very dark grayish brown silt loam, 0-10"</td></tr><tr><td>Subsurface layer:</td><td>Dark yellowish brown silt loam, 10-13"</td></tr><tr><td>Subsoil layer:</td><td>Yellowish brown and grayish brown very fine sandy loam, 13-18"</td></tr><tr><td>Substratum:</td><td>Grayish brown loamy very fine sand, 18-70"</td></tr></table>	Surface layer:	Very dark grayish brown silt loam, 0-10"	Subsurface layer:	Dark yellowish brown silt loam, 10-13"	Subsoil layer:	Yellowish brown and grayish brown very fine sandy loam, 13-18"	Substratum:	Grayish brown loamy very fine sand, 18-70"
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Substratum:	Grayish brown loamy very fine sand, 18-70"								
Hydrologic Group:	Group C								
Surface Run Off:	Medium								
Permeability:	Moderate throughout the profile.								
Depth to Bedrock:	Very deep, greater than 60".								
Hazard to Flooding:	None								

INCLUSIONS (Within Mapping Unit)

Similar:	Croghan, Elmwood
Dissimilar:	Nicholville (S.W.P.), Buxton

USE AND MANAGEMENT

Stormwater design: Nicholville is a moderately well drained soil, exhibiting a seasonal high groundwater table 1.5-2.0 feet beneath the soil surface in the spring and during periods of high precipitation. Nicholville soils exhibit permeabilities of 0.6-2.0 inches/hour, through the profile.



DATE:	REVISIONS:

WATERCOURSE/RUNOFF
REVIEW SITE PLAN
 PREPARED FOR
NORTHEAST CIVIL SOLUTIONS
 WESTERN AVENUE
 (MAP U-11, LOT 8-1)
 MANCHESTER, MAINE

 Albert Frick Associates, Inc. Environmental Consultants Gorham, Maine	
Drawn By: B.O.	Checked By: J.L.
Date: 11/3/15	Scale: 1" = 40'