



Memorandum

To: Craig Burgess, PE

From: Gary Fullerton, LSS, LSE

A handwritten signature in black ink, appearing to read "Gary Fullerton", written over a horizontal line.

Date: September 11, 2020

Project: #20326 – Lot 3, Quarry Ridge Business Park, Windham

The attached test pits logs were recorded and observed on September 1, 2020. The test pits revealed that most of this property was filled. Test pits 1 and 2 had enough original soil to meet the minimum standards for suitable soils for septic systems in accordance with Maine Subsurface Wastewater Disposal Rules. The remaining test pits would meet the minimum standards if the fill was placed prior to October 31, 1995. Ledge was found within 60 inches in all of the test pits.

SOIL PROFILE/CLASSIFICATION INFORMATION

Detailed Description of Subsurface Conditions at Project Sites

Project Name: QUARRY RIDGE BUSINESS PARK	Applicant Name: DWIGHT INVESTMENTS LLC	Project Location (municipality): WINDHAM
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SOIL DESCRIPTION AND CLASSIFICATION				
Exploration Symbol: <u>TP-1</u> <input checked="" type="checkbox"/> Test Pit <input type="checkbox"/> Boring				
0" Depth of Organic Horizon Above Mineral Soil				
Texture	Consistency	Color	Mottling	DEPTH BELOW MINERAL SOIL SURFACE (inches)
				0
				1
				2
				3
				4
				5
SANDY LOAM FILL	FRIABLE TO FIRM	2.5Y 5/3 LIGHT OLIVE BROWN	NONE OBSERVED	6
				7
				8
				9
				10
				12
				14
				16
				18
PEA GRAVEL FILL				20
				22
				24
				26
				28
				30
				32
				34
				36
				38
				40
GRAVELLY SAND	FRIABLE	10YR 4/3 BROWN	NONE OBSERVED	42
				44
				46
				48
				50
				52
				54
				56
				58
				60
LEDGE @ 60"				
<input type="checkbox"/> hydric <input checked="" type="checkbox"/> non-hydric	Slope % <u>0-3</u>	Limiting factor <u>60"</u>	<input type="checkbox"/> ground water <input type="checkbox"/> restrictive layer <input checked="" type="checkbox"/> bedrock	

C.S.S. Soil Series / phase name:	Drainage Class	Hydrologic Group
L.S.E. Soil Classification:	<u>12(4)</u> Profile <u>B</u> Drainage Class	<u>B</u> Design Class

SOIL DESCRIPTION AND CLASSIFICATION				
Exploration Symbol: <u>TP-3</u> <input checked="" type="checkbox"/> Test Pit <input type="checkbox"/> Boring				
0" Depth of Organic Horizon Above Mineral Soil				
Texture	Consistency	Color	Mottling	DEPTH BELOW MINERAL SOIL SURFACE (inches)
				0
				1
				2
				3
				4
				5
				6
				7
SANDY LOAM FILL	FRIABLE TO FIRM	2.5Y 5/3 LIGHT OLIVE BROWN	NONE OBSERVED	8
				9
				10
				12
				14
				16
				18
				20
				22
				24
				26
				28
				30
				32
				34
				36
				38
				40
				42
				44
				46
				48
				50
				52
				54
				56
				58
				60
LEDGE VARIES 30" TO 40"				
<input type="checkbox"/> hydric <input checked="" type="checkbox"/> non-hydric	Slope % <u>0-3</u>	Limiting factor <u>30"</u>	<input type="checkbox"/> ground water <input type="checkbox"/> restrictive layer <input checked="" type="checkbox"/> bedrock	

C.S.S. Soil Series / phase name:	Drainage Class	Hydrologic Group
L.S.E. Soil Classification:	<u>12(3)</u> Profile <u>All</u> Drainage Class	<u>All</u> Design Class

SOIL DESCRIPTION AND CLASSIFICATION				
Exploration Symbol: <u>TP-2</u> <input checked="" type="checkbox"/> Test Pit <input type="checkbox"/> Boring				
0" Depth of Organic Horizon Above Mineral Soil				
Texture	Consistency	Color	Mottling	DEPTH BELOW MINERAL SOIL SURFACE (inches)
				0
				1
				2
				3
				4
				5
SANDY LOAM FILL	FRIABLE TO FIRM	2.5Y 5/3 LIGHT OLIVE BROWN	NONE OBSERVED	6
				7
				8
				9
				10
				12
				14
				16
				18
				20
				22
				24
				26
				28
				30
				32
				34
				36
				38
				40
				42
				44
				46
				48
				50
				52
				54
				56
				58
				60
LEDGE @ 45"				
<input type="checkbox"/> hydric <input checked="" type="checkbox"/> non-hydric	Slope % <u>0-3</u>	Limiting factor <u>45"</u>	<input type="checkbox"/> ground water <input type="checkbox"/> restrictive layer <input checked="" type="checkbox"/> bedrock	

C.S.S. Soil Series / phase name:	Drainage Class	Hydrologic Group
L.S.E. Soil Classification:	<u>12(4)</u> Profile <u>All</u> Drainage Class	<u>All</u> Design Class

SOIL DESCRIPTION AND CLASSIFICATION				
Exploration Symbol: <u>TP-4</u> <input checked="" type="checkbox"/> Test Pit <input type="checkbox"/> Boring				
0" Depth of Organic Horizon Above Mineral Soil				
Texture	Consistency	Color	Mottling	DEPTH BELOW MINERAL SOIL SURFACE (inches)
				0
				1
				2
				3
				4
				5
SANDY LOAM FILL	FRIABLE TO FIRM	2.5Y 5/2 GRAYISH BROWN	NONE OBSERVED	6
				7
				8
				9
				10
				12
				14
				16
				18
				20
				22
				24
				26
				28
				30
				32
				34
				36
				38
				40
				42
				44
				46
				48
				50
				52
				54
				56
				58
				60
LEDGE @ 32"				
<input type="checkbox"/> hydric <input checked="" type="checkbox"/> non-hydric	Slope % <u>0-3</u>	Limiting factor <u>18"</u>	<input type="checkbox"/> ground water <input type="checkbox"/> restrictive layer <input checked="" type="checkbox"/> bedrock	

C.S.S. Soil Series / phase name:	Drainage Class	Hydrologic Group
L.S.E. Soil Classification:	<u>12(3)</u> Profile <u>C</u> Drainage Class	<u>C</u> Design Class

Professional Endorsements (as applicable)

C.S.S. signature:	Date:
name printed/typed:	Lic.#:
L.S.E. signature: 	Date: 9/1/20
name printed/typed: Gary M. Fullerton	Lic.#: 355



affix professional seal

Stormwater Narrative

Quarry Ridge Business Park Lot 3 Division Windham, Maine

The proposed project at Quarry Ridge Business Park involves the division of Lot 3 into two lots. Lot 3 was originally approved as part of Phase 1A. Impervious limits were assumed for future development on each lot to support stormwater water quality and quantity calculations. Lot 3 was assumed to support 2.01 acres of total impervious area. Runoff from the impervious area on Lot 3 was designed to drain toward the roadside ditch along Bedrock Terrace. The ditch conveys runoff southwest to a 30-inch cross culvert that outlets into a detention pond, designated SW-2, for water quality and quantity control. Detention pond SW-2 is located immediately west of the subject site, on the opposite side of Enterprise Drive. The pond and Enterprise Drive were completed, and the roadway was accepted by the Town of Windham.

The proposed lot division will result in two lots; Lot 3A being 1.84 acres and Lot 3 B being 2.04 acres. Development on the two lots is not expected to result in more than 2.01 acres of total impervious surface. The table on the Amended Subdivision Plan was updated to show a maximum of 0.95 acres of impervious surface on Lot 3A, and 1.06 acres of impervious surface on Lot 3B, for a total of 2.01 acres. Site development on both lots is not anticipated to change the stormwater management plan included with the most recent State and Local approval documents. Lot development will include provisions to direct runoff from Lot 3A and Lot 3B toward the roadside ditch along Bedrock Terrace.

Basic Standards per Section 4(A) of the Department of Environmental Protection Chapter 500 outline specific guidelines for erosion control practices which will be generally followed for development of the two lots. An Erosion and Sedimentation Control Plan was created for the project that emphasizes the installation of sedimentation barriers and vegetation to minimize erosion potential from development activities during and after construction. The Erosion and Sedimentation Control Plan is incorporated into the original design plans and includes the locations of the erosion control provisions (i.e., silt fence) along with notes and construction details for reference by the contractor during construction of the Lifelight facility. With incorporation of these measures, no significant impacts to off-site drainage related to erosion are anticipated due to the lot division.

Sincerely,



Craig A. Burgess, P.E.
Project Manager

September 8, 2020




SEBAGO
T E C H N I C S
Memorandum

20326

To: Craig Burgess, P.E.
Sebago Technics, Inc

From: Derek Caldwell, P.E., PTOE
Sebago Technics, Inc

Date: September 8, 2020

Subject: Traffic Permitting Assessment
Amended Subdivision Review – Quarry Ridge Business Park Lot 3
Windham, Maine

Project Understanding

Dwight Investments, LLC proposes to divide Lot 3 within the existing Quarry Ridge Business Park in Windham to create two buildable parcels. The current parcel is accessed from both Enterprise Drive and Bedrock Terrace. Enterprise Drive provides access to the park as a whole by means of the unsignalized intersection with Route 302.

Permitting History

It is our understanding that the Quarry Ridge Business Park was issued a MaineDOT Traffic Movement Permit (TMP) in 2008 for the buildout of 180,000 square feet of general business park building area. This proposed buildout assumed approximately 15,000 square feet of building area on each of twelve lots. The TMP was issued for a total 257 trips in the AM Peak Hour and 253 trips in the PM Peak Hour. Divided amongst the twelve lots, this would equate to approximately 21 AM Peak Hour trips and 21 PM Peak Hour Trips per lot.

The existing approved subdivision plan for the business park states that the if the buildout of any lots exceeds 15,000 square feet than additional traffic information should be submitted. Currently three of the lots within the park are developed, which were presumably permitted under the approved TMP for the park.

Proposed Lot Division

This project is filing an Amended Subdivision application to divide Lot 3 of the park into two buildable parcels. At this time specific building details or uses are not included as part of the project. While the proposed subdivision amendment would create an additional buildable lot, it is not anticipated that the buildable area on each respective lot would result in a significant increase in potential building square footage in the park as a whole, but presumably would result in a buildout greater than 15,000 square feet when considering both of the newly created lots. Additionally, where only three lots are built out at this time, development of the subject lots would be considered to be the 4th and 5th developed lots, well below the permitted twelve lots.

It is noted that the development would need to be revisited when the site plan application is submitted to ensure the actual proposed buildout, in addition to other lots that may be developed in the interim, do not exceed the permitted level of 180,000 square feet of general business park building area and to address the

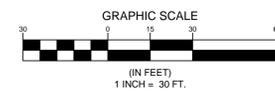
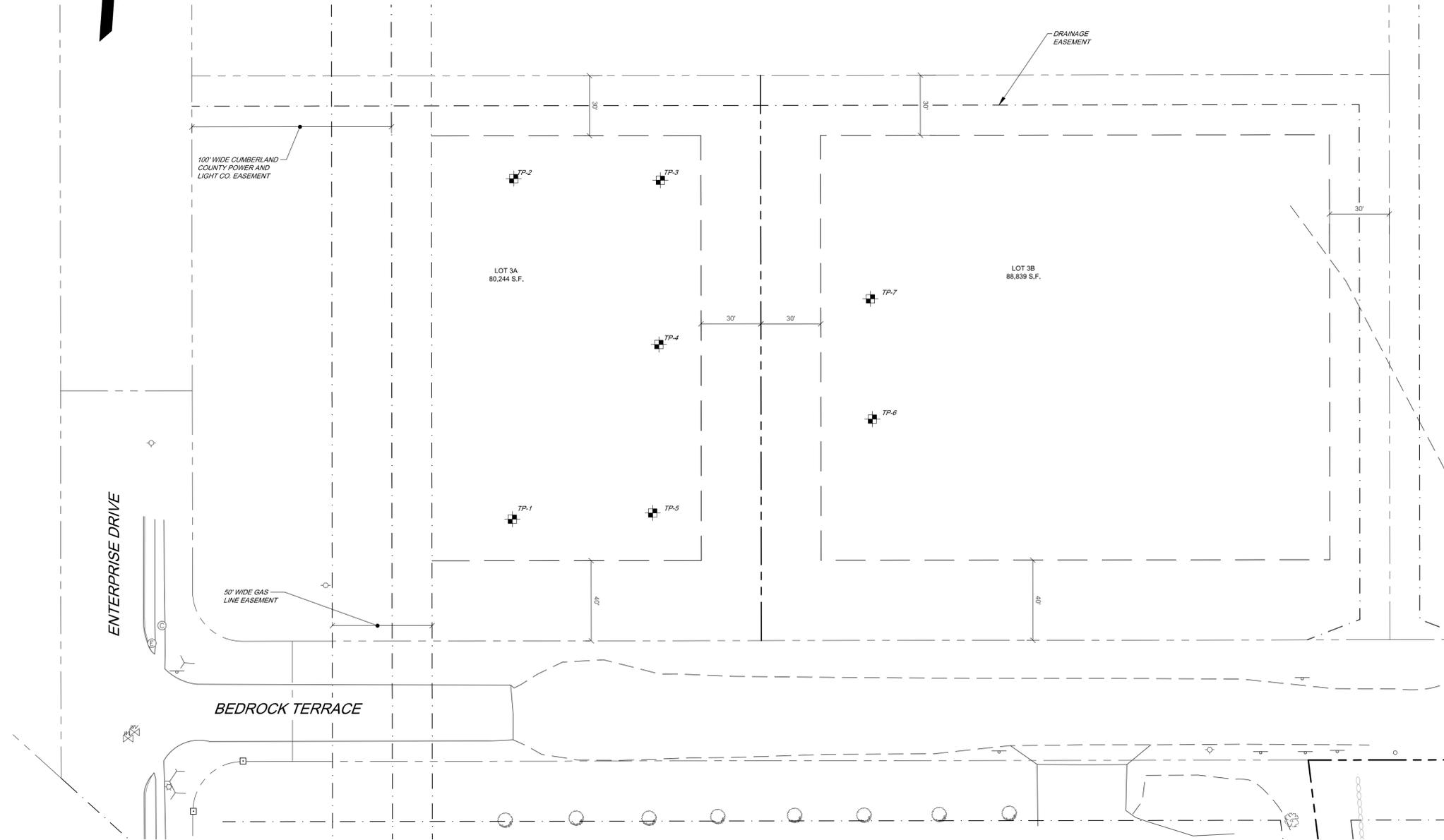
condition that additional traffic information should be submitted if the buildout of any lot exceeds 15,000 square feet.

When the proposed development program of the lots is known, a trip generation calculation will be completed to compare the trip generation based on the actual proposed use(s) to the permitted number of trips per lot as calculated based on the TMP (21 AM Peak Hour Trips and 21 PM Peak Hour Trips) do determine if any additional study or modification to permits would be required.



LEGEND

EXISTING	PROPOSED
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TP-1	TEST PIT
○	EDGE GRAVEL
○	DECIDUOUS TREE



PROGRESS
PRINT

NOT FOR
CONSTRUCTION

REV.	BY	DATE	STATUS
A	CAB	09-09-2020	SUBMITTED TO TOWN

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNICS, INC. ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNICS, INC.

SEBAGO
TECHNICS

WWW.SEAGOTECHNICS.COM

75 John Roberts Rd.
Sullivan, ME 04106
South Portland, ME 04106
Tel. 207-200-2100

TEST PIT PLAN
OF:
LOT 3 PARCEL DIVISION
BEDROCK TERRACE
WINDHAM, MAINE

FOR:
DWIGHT INVESTMENTS, LLC
1130 JAMES JACK LANE
CHARLOTTE, NORTH CAROLINA

DESIGNED	CAB
DRAWN	MAL
CHECKED	CAB
DATE	09-09-2020
SCALE	1" = 30'
PROJECT	20326

20326 B.dwg, TAB 52

From: Craig Burgess <cburgess@sebagotechnics.com>
Sent: Wednesday, September 16, 2020 5:30 PM
To: Jennifer Curtis
Subject: Lot 3, Quarry Ridge Business Park

Hi Jenn,

To further expand upon the soils memo that was emailed for Lot 3 of Quarry Ridge Business Park, Grondin believes this area was filled in the late 80's or early 90's before 1995. Our soil evaluator sees no issues with this timeline for a disposal system.

Have a great night,

Craig Burgess, PE *Project Manager*

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