SEBAGO TECHNICS
CIVIL ENGINEERING • SURVEYING • LANDSCAPE ARCHITECTURE

75 John Roberts Road, Suite 4A
South Portland, ME 04106-6963
207.200.2100

Project No.: 20279-01 Date: July 22, 2023

Location: Marsden Woods Subdivision, Long John Road – Rye, NH

Weather: Sunny – 91 degrees

Attending: None

STI Present: Dylan Stuart– Sebago Technics, Inc

FIELD REPORT

Discussion

This field report covers a site visit conducted on the afternoon of July 17, 2023. This visit was made to check on the construction progress and erosion control aspects. The site had standing water in some places but appeared to be stable.

Work Completed

- Erosion control devices continue to be installed around the site and are in good condition.
- The majority of the ledge has been removed at the locations of the bio-retention areas.

Erosion and Sediment Control

- A stone construction entrance is in place on site along existing driveway where tree removal equipment has access to proposed lots; however, additional stone construction entrances shall be installed where regular access from disturbed areas on the site enter onto the existing pavement.
- Erosion control mix berms are installed around the perimeter of the site and silt fence and silt socks are installed downgradient of the more critical slopes on the site.
- Erosion control silt socks are installed adjacent to the site entrance downgradient of the proposed bio-retention areas.

Discussions with the Contractor

- None

Problems Noted During Site Visit

- As discussed at the pre-construction meeting and noted in our previous field reports, the light weight of wood chips makes their use in an erosion control mix berm problematic. The contractor has placed these type of ECM berms along the sides in areas not receiving runoff or in locations of significant fill. The contractor will need to closely monitor the wood chip berms and be prepared to replaced them should detrimental conditions arise.
- Minor tracking of material onto Long John Road was observed where the water main was installed. Contractor shall monitor area and touch up when necessary.

Additional Information

- Sebago received a July 14, 2023 Field Density Report from Civil Connection, LLC for a field investigation conducted on June 30th for the material placed and compacted in the water main crossing trench of Long John Road. the results indicated that a compaction of greater than 95% was achieved in the water main trench. A copy of this report is attached at the end of this report.
- The contractor should update Sebago as to the schedule moving forward as it appears that the underlying ledge may have been either removed or broken up so that the improvements can be constructed.

Copies To: Kim Reed, Rye Planning and Zoning Administrator
Patricia Losik, Planning Board Chair
Jason Rucker, Rye PWD Director
Chuck Marsden, Rye Building Inspector
Corey Colwell, TFMoran, Inc.
Joel Asadoorian, Developer
Darryl Walker, Taylor Enterprises

Date: July 22, 2023 **Signed:** Stephen Harding, P.E. - Sebago Technics, Inc.

Photo 1 (07-17-23): Excavated area of drainage swale toward area of proposed driveway for single family unit.

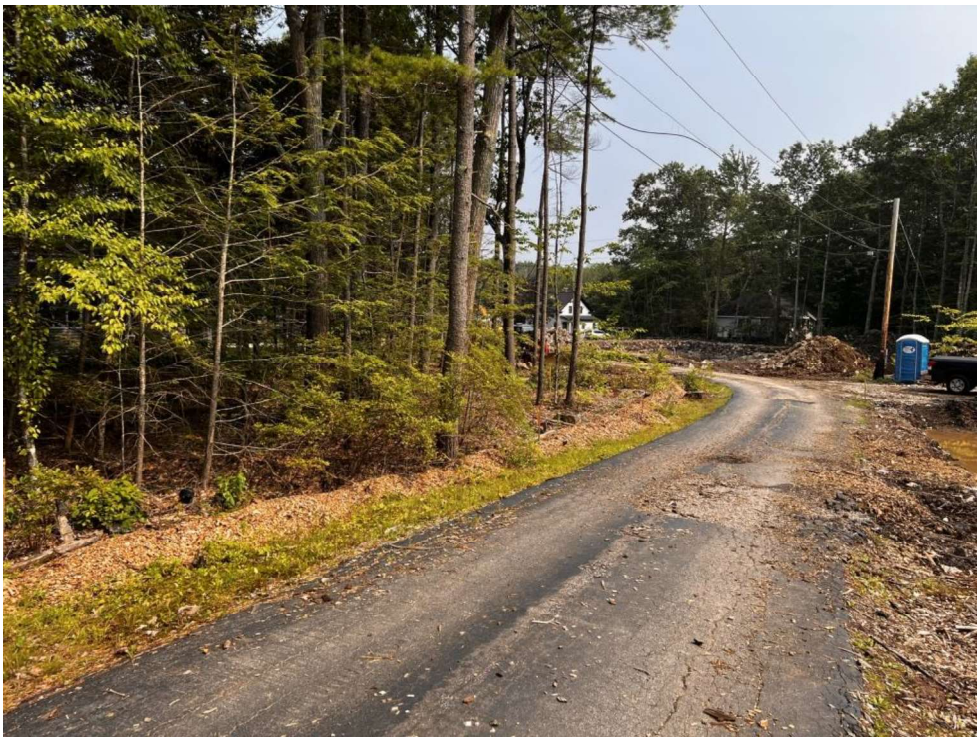

Photo 2 (07-17-23): Existing driveway to 711 Long John Road facing south.

Photo 3 (07-17-23): Wood chip pile being utilized for erosion control mix berms along perimeter of site.

Photo 4 (07-17-23): Existing driveway facing Long John Road.

Photo 5 (07-17-23): Overall area of Bio-Retention Area #1 with blasted ledge removed.

Photo 6 (07-17-23): Excavated area of sediment forebay for Bio-Retention Area #1.

Photo 7 (07-17-23): North side of main entrance to site with erosion control silt sock placed at Long John Road.

Photo 8 (07-17-23): Site clearing along north side of existing driveway facing Long John Road.

Photo 9 (07-17-23): Site entrance at Long John Road with trench cut for water main installation.

Photo 10 (07-17-23): Erosion control silt fence and silt sock installed on site along Long John Road.

Photo 11 (07-17-23): Ledge removal taking place along the site entrance by use of hoe-ram.

Photo 12 (07-17-23): Excavated area for Bio-Retention #1.

Photo 13 (07-17-23): Erosion control mix berm placed around perimeter of site and in good condition.

Photo 14 (07-17-23): Removal of ledge along existing driveway toward 711 Long John Road dwelling.

Civil Connection, LLC.

Providing Engineering & Material Testing Services

LETTER OF TRANSMITTAL

TO: Joel Asadoorian – Shackford Builders LLC
DATE: 7/14/2023

PROJECT: Long John Rd – Rye, NH

CC PROJECT NO.: 23-326

Attached are the following for your use:

COPIES	DATE	LAB NUMBER	DESCRIPTION
			Concrete Report - Cylinders
			Concrete Inspection Report
			Reinforcing Steel Inspection Report
1	6/30/23	L-225-23	Field Density Report
1		L-225-23	Particle Size Distribution Report
1		L-225-23	Compaction Test Report
			Field Report
			Subgrade Inspection Memorandum

CC: Shackford Builders LLC – Joel Asadoorian, Owner
Taylor Enterprise LLC – Richard Taylor
Town Engineer – S Harding

Reviewed By: Richard E. Bushnell, P.E.

Main Office – 38 Edwards Drive, Gilmanton IW, NH 03837
Laboratory Facility – 6 Oxbow Pond Road, Unit #1 Canterbury, NH 03224
p (855) 393-9842
www.civilconnection.net

Civil Connection, LLC.

Providing Engineering & Material Testing Services

FIELD DENSITY REPORT

PROJECT: Long John Rd	**PROJECT NO.:** 23-326
LOCATION: Rye, NH	**WEATHER:** 67, Sunny
INSPECTION DATE: 6/30/2023	**CONTRACTOR:**
CLIENT: Shackford Builders	**EXCAVATION CONTRACTOR:** DWE & Sons
SITE CONTACT: Joel	**FIELD TECHNICIAN:** Tyler Bryant

The undersigned arrived at the project to perform in place soil density testing using a ☒ Troxler Model 3411 ☐ Troxler Model 3430 (serial no.: _____) in accordance with ASTM D 6938 (direct transmission method) or ☐ Sand Cone apparatus (ASTM D 1556). Field density tests were performed at locations: ☒ indicated below or ☐ shown on the attached field sketch. The site superintendent or project representative, Mr. Asadoorian of Shackford Builders provided all locations and indicated the source of the soil being placed and compacted.

The field density results were compared to the maximum dry density as determined by ASTM procedure: ☒ D 1557 or ☐ D 698; the results of which are reported as Relative Compaction (RC). Project specifications require a minimum RC of 95%. At the time of departure from the site, all test results: ☒ were or ☐ were not in compliance with the specifications. In the event of inadequate compaction the area: ☐ was re-compacted and retested or ☐ will be re-compacted and retested at a later time. The superintendent/project representative is responsible to reschedule a retest of the deficient area. The project superintendent/project representative, Mr. Asadoorian was informed of all test results prior to departure from the job site.

CC FIELD DENSITY TEST RESULTS

Test No.	Location	Elev.	Sample #	Max. Dry Density (pcf)	Opt. M.C. (%)	Field Dry Density (pcf)	Field M.C. (%)	RC %	Meets Project Specs Y/N
1	Water Main Trench across road	Base	L-225-23	140.2	5.2	134.8	4.9	96.1	Y

REMARKS:

Reviewed by: Richard Bushnell, P.E. **Date:** 7/13/2023

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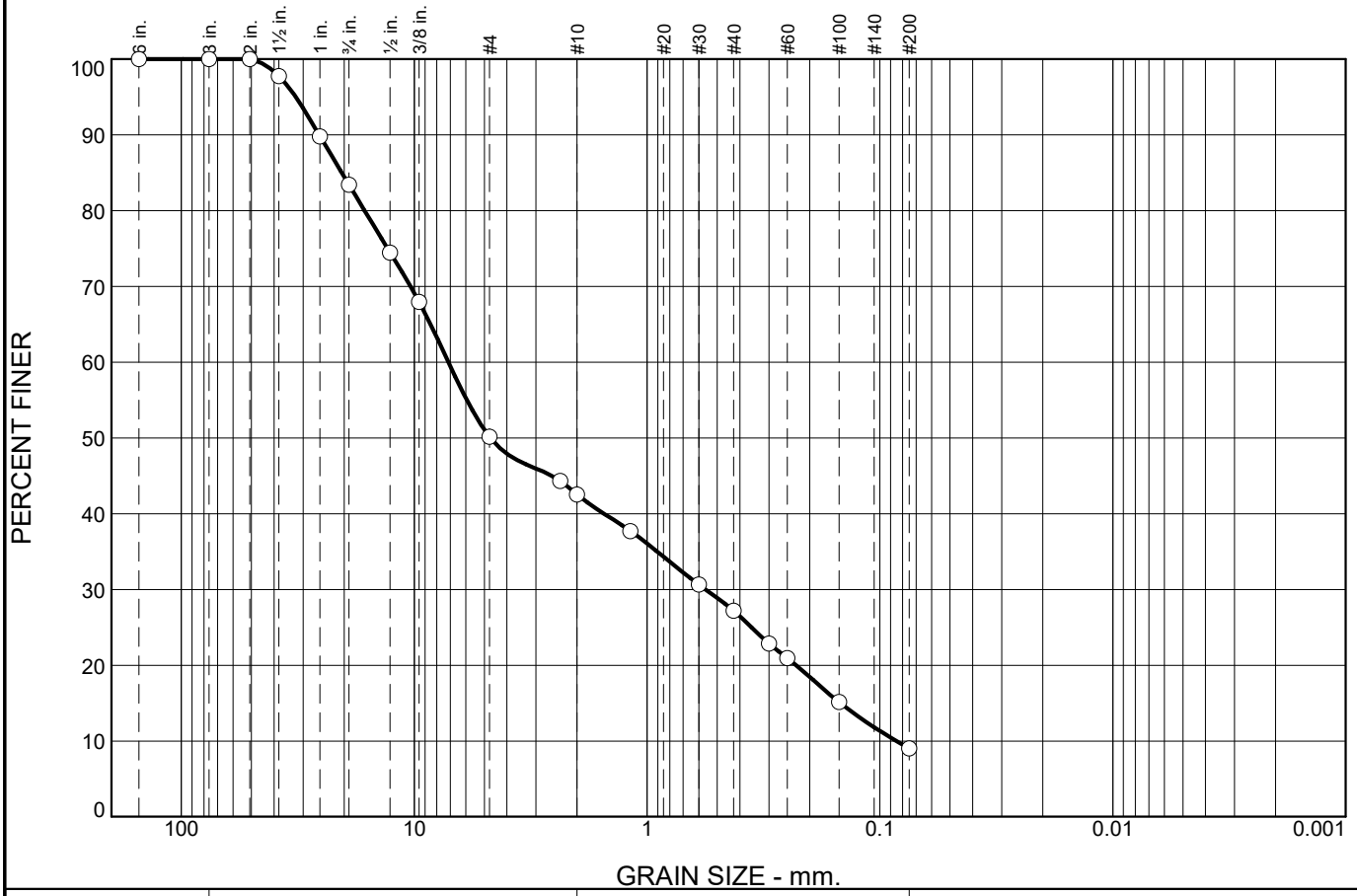
Particle Size Distribution Report



% +3"	% Gravel			% Sand			% Fines
	Coarse	Medium	Fine	Coarse	Medium	Fine	
0.0	10.2	21.8	25.5	11.9	9.7	11.9	9.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
6"	100.0		
3"	100.0		
2"	100.0		
1.5"	97.8		
1"	89.8		
3/4"	83.4		
1/2"	74.5		
3/8"	68.0		
#4	50.1		
#8	44.3		
#10	42.5		
#16	37.7		
#30	30.6		
#40	27.2		
#50	22.9		
#60	20.9		
#100	15.1		
#200	9.0		

* (no specification provided)

Soil Description

coarse to fine GRAVEL, and coarse to fine Sand, trace Silt

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 25.6229 D_{85}= 20.4598 D_{60}= 7.1359
D_{50}= 4.7098 D_{30}= 0.5616 D_{15}= 0.1482
D_{10}= 0.0849 C_u= 84.03 C_c= 0.52

Classification

USCS= AASHTO=

Remarks

Location: On-Site
Sample Number: L-225-23

Date: 7/11/2023

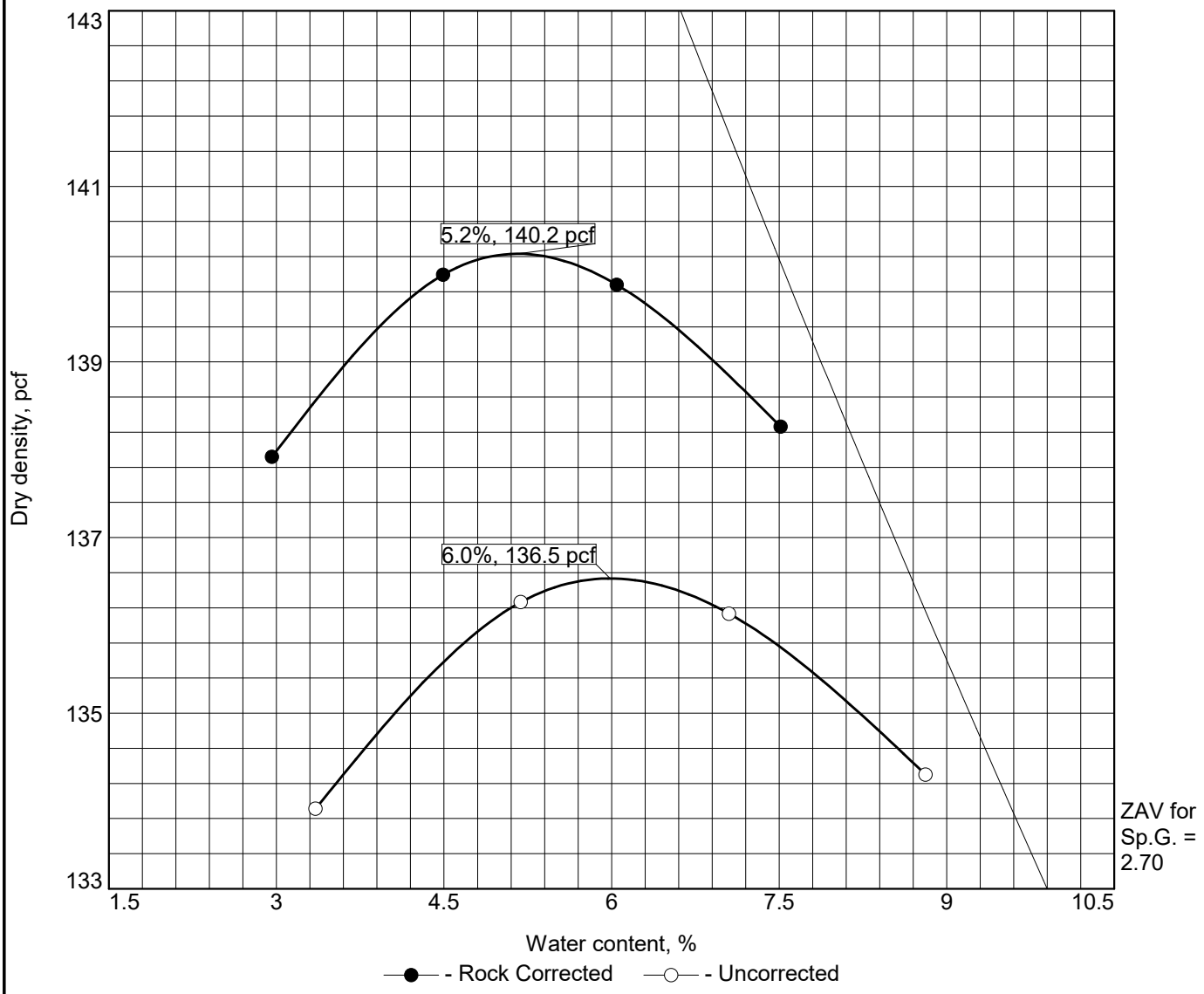
Civil Connection, LLC

Canterbury, New Hampshire

Client: Shackford Builders, LLC.
Project: Long John Road
Rye, NH
Project No: 23-326

Figure

COMPACTION TEST REPORT



Test specification: ASTM D 1557-00 Method C Modified
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/4 in.	% < No.200
	USCS	AASHTO						
				2.65			16.6	9.0

ROCK CORRECTED TEST RESULTS	UNCORRECTED	MATERIAL DESCRIPTION
Maximum dry density = 140.2 pcf	136.5 pcf	coarse to fine GRAVEL, and coarse to fine Sand, trace Silt
Optimum moisture = 5.2 %	6.0 %	

Project No. 23-326 **Client:** Shackford Builders, LLC.
Project: Long John Road
Rye, NH
○ **Location:** On-Site **Sample Number:** L-225-23

Civil Connection, LLC

Canterbury, New Hampshire

Remarks:

Figure