



**REPORT OF SOILS FIELD COMPACTION TESTING**

**CLIENT:** Ludlow Construction Co., Inc.  
 19 Carmelina's Circle  
 Ludlow, MA 01056  
 Attn: Mr. Mike Pio

**PROJECT:** Durham Meadows Waterline  
 Durham, CT

**DATE:** October 14, 2019

**REPORT #:** 19-75-012-012 Page 1 of 7

**General Location:** South Main Street, Waterline Trench  
**Field Rep:** Stephen Sturges  
**General Contractor:** Ludlow Construction Co., Inc.  
**Earthwork Contractor:** Ludlow Construction Co., Inc.  
**Air Temp:** 50°F  
**Weather:** Night/Mist  
**Soil ID#:** 3519-600  
**Soil Type:** Reddish Brown Silty Sand w/ Gravel  
**Proctor Sample Source:** Onsite

**Proctor Value:** 136.3 lbs/ft<sup>3</sup>

**Optimum Moisture:** 6.6%

**Gauge Type:** Troxler 3430

**Required Compaction:** 95.0%

TEST NUMBER	DEPTH/ELEV. (in/ft)	MOISTURE (%)	DRY DENSITY (pcf)	COMPACTION (%)
1	10"/44.0" BFG	11.5%	131.7	96.6%
<b>LOCATION:</b> Station #116+03				
2	10"/ 44.0" BFG	10.7%	131.1	96.2%
<b>LOCATION:</b> Station #116+28				
3	10"/ 44.0" BFG	9.9%	130.7	95.9%
<b>LOCATION:</b> Station #116+53				
4	10"/ 44.0" BFG	8.9%	130.9	96.0%
<b>LOCATION:</b> Station #116+78				
5	10"/ 44.0" BFG	7.6%	131.0	96.1%
<b>LOCATION:</b> Station #117+03				
6	10"/ 44.0" BFG	8.4%	132.0	96.8%
<b>LOCATION:</b> Station #117+28				
7	10"/ 44.0" BFG	8.2%	131.4	96.4%
<b>LOCATION:</b> Station #117+53				
8	10"/ 44.0" BFG	9.7%	130.5	95.7%
<b>LOCATION:</b> Station #117+78				

**REMARKS:** Crew finished at Station #118+31  
 BFG - Below Finish Grade



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**Gauge Type:** Troxler 3430

**Required Compaction:** 95.0%

TEST NUMBER	DEPTH/ELEV. (in/ft)	MOISTURE (%)	DRY DENSITY (pcf)	COMPACTION (%)
9	12"/32.0" BFG	8.0%	131.2	96.3%
<b>LOCATION:</b>	Station #116+03			
10	12"/ 32.0" BFG	8.8%	130.4	95.7%
<b>LOCATION:</b>	Station #116+28			
11	12"/ 32.0" BFG	10.1%	130.6	95.8%
<b>LOCATION:</b>	Station #116+53			
12	12"/ 32.0" BFG	11.5%	131.0	96.1%
<b>LOCATION:</b>	Station #116+78			
13	12"/ 32.0" BFG	10.6%	131.8	96.7%
<b>LOCATION:</b>	Station #117+03			
14	12"/ 32.0" BFG	9.5%	131.9	96.8%
<b>LOCATION:</b>	Station #117+28			
15	12"/ 32.0" BFG	9.0%	130.7	95.9%
<b>LOCATION:</b>	Station #117+53			
16	12"/ 32.0" BFG	7.9%	129.6	95.1%
<b>LOCATION:</b>	Station #117+78			

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**Proctor Sample Source:** Onsite

**Proctor Value:** 136.3 lbs/ft<sup>3</sup>

**Optimum Moisture:** 6.6%

**Gauge Type:** Troxler 3430

**Required Compaction:** 95.0%

TEST NUMBER	DEPTH/ELEV. (in/ft)	MOISTURE (%)	DRY DENSITY (pcf)	COMPACTION (%)
17	12"/20.0" BFG	8.9%	132.4	97.1%
<b>LOCATION:</b> Station #116+03				
18	12"/ 20.0" BFG	9.9%	131.4	96.4%
<b>LOCATION:</b> Station #116+28				
19	12"/ 20.0" BFG	8.6%	130.6	95.8%
<b>LOCATION:</b> Station #116+53				
20	12"/ 20.0" BFG	10.7%	130.8	96.0%
<b>LOCATION:</b> Station #116+78				
21	12"/ 20.0" BFG	7.9%	132.1	96.9%
<b>LOCATION:</b> Station #117+03				
22	12"/ 20.0" BFG	8.8%	131.4	96.4%
<b>LOCATION:</b> Station #117+28				
23	12"/ 20.0" BFG	8.3%	130.5	95.7%
<b>LOCATION:</b> Station #117+53				
24	12"/ 20.0" BFG	9.3%	130.7	95.9%
<b>LOCATION:</b> Station #117+78				

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**General Contractor:** Ludlow Construction Co., Inc.  
**Earthwork Contractor:** Ludlow Construction Co., Inc.  
**Air Temp:** 50°F  
**Weather:** Night/Mist  
**Soil ID#:** 3519-608  
**Soil Type:** Light Gray Gravel w/ Silt & Sand (1.5" Gravel)  
**Proctor Sample Source:** Haynes Group

**Proctor Value:** 138.9 lbs/ft<sup>3</sup>      **Optimum Moisture:** 7.8%  
**Gauge Type:** Troxler 3430      **Required Compaction:** 95.0%

TEST NUMBER	DEPTH/ELEV. (in/ft)	MOISTURE (%)	DRY DENSITY (pcf)	COMPACTION (%)
25	8"/ 12.0" BFG	3.0%	136.7	98.4%
<b>LOCATION:</b> Station #116+03				
26	8"/ 12.0" BFG	4.4%	135.5	97.6%
<b>LOCATION:</b> Station #116+28				
27	8"/ 12.0" BFG	2.9%	135.9	97.8%
<b>LOCATION:</b> Station #116+53				
28	8"/ 12.0" BFG	4.0%	136.2	98.1%
<b>LOCATION:</b> Station #116+78				
29	8"/ 12.0" BFG	1.9%	134.8	97.0%
<b>LOCATION:</b> Station #117+03				
30	8"/ 12.0" BFG	2.3%	135.5	97.6%
<b>LOCATION:</b> Station #117+28				
31	8"/ 12.0" BFG	3.6%	135.6	97.6%
<b>LOCATION:</b> Station #117+53				
32	8"/ 12.0" BFG	2.8%	134.7	97.0%
<b>LOCATION:</b> Station #117+78				

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**Gauge Type:** Troxler 3430 **Required Compaction:** 95.0%

TEST NUMBER	DEPTH/ELEV. (in/ft)	MOISTURE (%)	DRY DENSITY (pcf)	COMPACTION (%)
33	8" / 4.0" BFG	2.2%	136.4	98.2%
<b>LOCATION:</b>	Station #116+03			
34	8" / 4.0" BFG	2.6%	135.8	97.8%
<b>LOCATION:</b>	Station #116+28			
35	8" / 4.0" BFG	3.5%	135.0	97.2%
<b>LOCATION:</b>	Station #116+53			
36	8" / 4.0" BFG	3.9%	134.4	96.8%
<b>LOCATION:</b>	Station #116+78			
37	8" / 4.0" BFG	4.4%	136.7	98.4%
<b>LOCATION:</b>	Station #117+03			
38	8" / 4.0" BFG	5.0%	136.0	97.9%
<b>LOCATION:</b>	Station #117+28			
39	8" / 4.0" BFG	2.2%	135.4	97.5%
<b>LOCATION:</b>	Station #117+53			
40	8" / 4.0" BFG	1.8%	135.9	97.8%
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TEST NUMBER	DEPTH/ELEV. (in/ft)	MOISTURE (%)	DRY DENSITY (pcf)	COMPACTION (%)
41	10"/44.0" BFG	11.0%	133.3	97.8%
<b>LOCATION:</b>	Station #118+03			
42	12"/ 32.0" BFG	9.3%	131.7	96.6%
<b>LOCATION:</b>	Station #118+03			
43	12"/ 20.0" BFG	9.6%	130.6	95.8%
<b>LOCATION:</b>	Station #118+28			
<b>LOCATION:</b>				
<b>LOCATION:</b>				
<b>LOCATION:</b>				
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TEST NUMBER	DEPTH/ELEV. (in/ft)	MOISTURE (%)	DRY DENSITY (pcf)	COMPACTION (%)
44	8"/12.0" BFG	3.3%	136.0	97.9%
<b>LOCATION:</b>	Station #118+03			
45	8"/ 4.0" BFG	3.5%	136.4	98.2%
<b>LOCATION:</b>	Station #118+03			
46	8"/ 12.0" BFG	4.0%	136.8	98.5%
<b>LOCATION:</b>	Station #118+28			
47	8"/ 4.0" BFG	4.1%	137.0	98.6%
<b>LOCATION:</b>	Station #118+28			
<b>LOCATION:</b>				
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