



**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 2, 2019

**REPORT #:** 19-75-012-009 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:** 56°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	11.0%	131.2	96.3%
<b>LOCATION:</b>	Station #109+61			
2	10"/ 44.0" BFG	10.2%	131.8	96.7%
<b>LOCATION:</b>	Station #109+86			
3	10"/ 44.0" BFG	9.7%	130.7	95.9%
<b>LOCATION:</b>	Station #110+11			
4	10"/ 44.0" BFG	10.1%	130.4	95.7%
<b>LOCATION:</b>	Station #110+36			
5	10"/ 44.0" BFG	9.9%	132.0	96.8%
<b>LOCATION:</b>	Station #110+61			
6	10"/ 44.0" BFG	11.0%	131.5	96.5%
<b>LOCATION:</b>	Station #110+86			
7	10"/ 44.0" BFG	10.5%	131.3	96.3%
<b>LOCATION:</b>	Station #111+11			
8	10"/ 44.0" BFG	9.1%	131.0	96.1%
<b>LOCATION:</b>	Station #111+36			

**REMARKS:** Crew finished at Station #112+00  
 BFG - Below Finish Grade



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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 (%)
9	10"/32.0" BFG	10.6%	130.7	95.9%
<b>LOCATION:</b>	Station #109+61			
10	10"/ 32.0" BFG	9.8%	130.0	95.4%
<b>LOCATION:</b>	Station #109+86			
11	10"/ 32.0" BFG	8.7%	129.8	95.2%
<b>LOCATION:</b>	Station #110+11			
12	10"/ 32.0" BFG	10.3%	132.1	96.9%
<b>LOCATION:</b>	Station #110+36			
13	10"/ 32.0" BFG	11.2%	130.6	95.8%
<b>LOCATION:</b>	Station #110+61			
14	10"/ 32.0" BFG	12.0%	131.6	96.6%
<b>LOCATION:</b>	Station #110+86			
15	10"/ 32.0" BFG	12.3%	131.9	96.8%
<b>LOCATION:</b>	Station #111+11			
16	10"/ 32.0" BFG	8.9%	130.1	95.5%
<b>LOCATION:</b>	Station #111+36			

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**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	10"/20.0" BFG	9.0%	131.1	96.2%
<b>LOCATION:</b>	Station #109+61			
18	10"/ 20.0" BFG	7.7%	131.9	96.8%
<b>LOCATION:</b>	Station #109+86			
19	10"/ 20.0" BFG	7.9%	131.5	96.5%
<b>LOCATION:</b>	Station #110+11			
20	10"/ 20.0" BFG	8.5%	131.3	96.3%
<b>LOCATION:</b>	Station #110+36			
21	10"/ 20.0" BFG	8.8%	130.5	95.7%
<b>LOCATION:</b>	Station #110+61			
22	10"/ 20.0" BFG	7.8%	132.6	97.3%
<b>LOCATION:</b>	Station #110+86			
23	10"/ 20.0" BFG	7.5%	130.9	96.0%
<b>LOCATION:</b>	Station #111+11			
24	10"/ 20.0" BFG	9.0%	131.6	96.6%
<b>LOCATION:</b>	Station #111+36			

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**General Contractor:** Ludlow Construction Co., Inc.  
**Earthwork Contractor:** Ludlow Construction Co., Inc.  
**Air Temp:** 56°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%	137.8	99.2%
<b>LOCATION:</b>	Station #109+61			
26	8"/ 12.0" BFG	2.9%	136.8	98.5%
<b>LOCATION:</b>	Station #109+86			
27	8"/ 12.0" BFG	1.8%	135.6	97.6%
<b>LOCATION:</b>	Station #110+11			
28	8"/ 12.0" BFG	2.1%	135.7	97.7%
<b>LOCATION:</b>	Station #110+36			
29	8"/ 12.0" BFG	3.7%	134.9	97.1%
<b>LOCATION:</b>	Station #110+61			
30	8"/ 12.0" BFG	2.9%	136.0	97.9%
<b>LOCATION:</b>	Station #110+86			
31	8"/ 12.0" BFG	2.5%	135.3	97.4%
<b>LOCATION:</b>	Station #111+11			
32	8"/ 12.0" BFG	1.5%	134.6	96.9%
<b>LOCATION:</b>	Station #111+36			

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TEST NUMBER	DEPTH/ELEV. (in/ft)	MOISTURE (%)	DRY DENSITY (pcf)	COMPACTION (%)
33	8" / 4.0" BFG	1.9%	134.9	97.1%
<b>LOCATION:</b>	Station #109+61			
34	8" / 4.0" BFG	4.4%	135.0	97.2%
<b>LOCATION:</b>	Station #109+86			
35	8" / 4.0" BFG	3.7%	135.6	97.6%
<b>LOCATION:</b>	Station #110+11			
36	8" / 4.0" BFG	3.2%	136.2	98.1%
<b>LOCATION:</b>	Station #110+36			
37	8" / 4.0" BFG	4.0%	134.4	96.8%
<b>LOCATION:</b>	Station #110+61			
38	8" / 4.0" BFG	1.9%	133.8	96.3%
<b>LOCATION:</b>	Station #110+86			
39	8" / 4.0" BFG	2.9%	136.0	97.9%
<b>LOCATION:</b>	Station #111+11			
40	8" / 4.0" BFG	4.1%	135.2	97.3%
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TEST NUMBER	DEPTH/ELEV. (in/ft)	MOISTURE (%)	DRY DENSITY (pcf)	COMPACTION (%)
41	10"/44.0" BFG	8.6%	132.1	96.9%
<b>LOCATION:</b>	Station #111+61			
42	10"/ 32.0" BFG	8.3%	131.0	96.1%
<b>LOCATION:</b>	Station #111+61			
43	10"/ 20.0" BFG	7.7%	130.6	95.8%
<b>LOCATION:</b>	Station #111+61			
<b>LOCATION:</b>				
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TEST NUMBER	DEPTH/ELEV. (in/ft)	MOISTURE (%)	DRY DENSITY (pcf)	COMPACTION (%)
44	8"/ 12.0" BFG	4.3%	136.8	98.5%
<b>LOCATION:</b>	Station #111+61			
45	8"/ 4.0" BFG	2.7%	135.8	97.8%
<b>LOCATION:</b>	Station #111+61			
<b>LOCATION:</b>				
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