

PROJECT:	Durham Meadows Waterline Remedial Design		
CONTRACT NO.:	W912WJ19C0002	AECOM PROJECT NO.:	60494812
ENGINEER'S SUBMITTAL NO.:	02210-3	REVISION IDENTIFIER:	
CONTRACTOR'S SUBMITTAL NO.:	02210-3	REVISION IDENTIFIER:	
SUBJECT:	On-site Material Testing		
REVIEW CODES: A – Approved as submitted. B – Approved, except as noted on drawings. Resubmission not required. C – Approved, except as noted on drawings. Refer to attached comments. Resubmission required. D – Will be returned by separate correspondence. E – Disapproved. Refer to attached comments. F – Receipt Acknowledged. X – Receipt acknowledged, does not comply with contract requirements, as noted. G – Other action required.			
The Engineer's review is for general conformance with the design concept and Contract Documents. Markings or comments shall not be construed as relieving the Contractor from compliance with the Contract plans and specifications or from departures there from. The Contractor remains responsible for details and accuracy, for confirming and correlating all quantities and dimensions, for selecting fabrication processes, for techniques of assembly, and for performing work in a safe manner. AECOM Technical Services, Inc.			
DATE:	12 September 2019	REVIEWER:	R. Berlandy

The review is provided to assist the contractor in the management of construction. It should not be considered complete. In order to maintain continuity between submittals, the previous comment numbers have been retained. The shop drawing review comments follow:

COMMENT NUMBER	REFERENCE	CODE	COMMENT
1.	02210 1.04 A	F	Receipt Acknowledged

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

For use of this form, see ER 415-1-0; the proponent agency is CECW-CE

DATE 9/11/2019	TRANSMITTAL NO. 02210-3
-------------------	----------------------------

(This section will be initiated by the contractor)

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

TO: WESTOVER RESIDENT OFFICE 570 Patriot Avenue Box 70 Chicopee, MA 01022-1634	FROM: Ludlow Construction Co., Inc. 19 Carmelina's Circle, Ludlow MA01056	CONTRACT NO. W912WJ19C0002	THIS IS A: NEW TRANSMITTAL
-----------------------------------------------------------------------------------------	---------------------------------------------------------------------------------	-------------------------------	-------------------------------

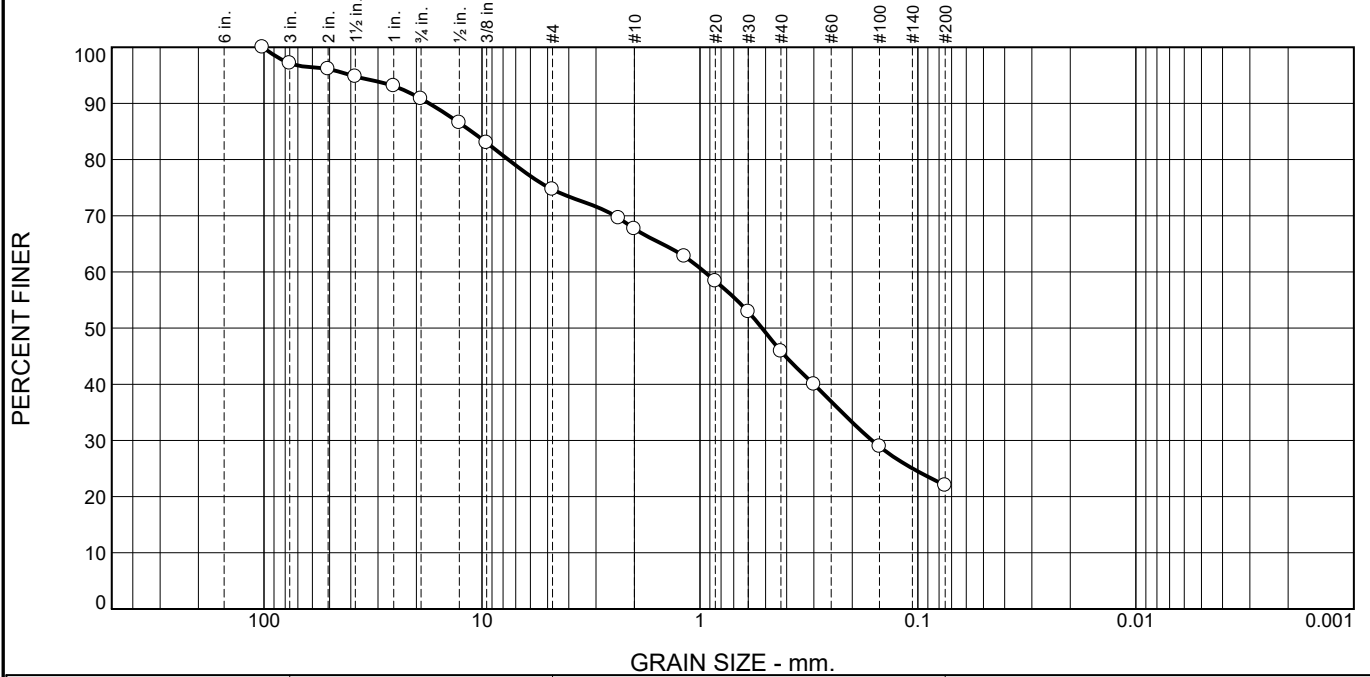
SPECIFICATION SEC. NO. (Cover only one section with each transmittal) 02210-Subsurface Drilling, Sampling & Testing	PROJECT TITLE AND LOCATION 01 Durham Meadows Waterline Remedial Design,	THIS TRANSMITTAL IS FOR: (Check one) <input type="checkbox"/> FIO <input checked="" type="checkbox"/> GA <input type="checkbox"/> DA <input type="checkbox"/> CR <input type="checkbox"/> DA/CR <input type="checkbox"/> DA/GA <input type="checkbox"/> S
------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

ITEM NO. (See Note 3)	DESCRIPTION OF SUBMITTAL ITEM (Type size, model number/etc)	SUBMITTAL TYPE CODE (See Note 8)	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT		FOR CONTRACTOR USE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE (Note 9) i.
				SPEC. PARA NO. e.	DRAWING SHEET NO. f.			
3	Test Results Other Material Remarks from Contractor Native material	06 - TEST REPORTS	0	1.04-A.3.e		A	No	

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

SECTION II - APPROVAL ACTION	
ENCLOSURES RETURNED (List by item No.)	NAME AND SIGNATURE OF CONTRACTOR
NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
2.9	6.3	16.1	7.0	21.8	23.9	22.0	

Test Results (ASTM D 422 & ASTM D1140)			
Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
4	100.0		
3	97.1		
2	96.1		
1.5	94.8		
1	93.1		
3/4	90.8		
1/2	86.5		
3/8	83.0		
#4	74.7		
#8	69.6		
#10	67.7		
#16	62.8		
#20	58.4		
#30	52.9		
#40	45.9		
#50	40.0		
#100	28.9		
#200	22.0		

* (no specification provided)

Material Description

Reddish brown silty sand with gravel

Atterberg Limits (ASTM D 4318)

PL= - LL= - PI= -

Classification

USCS (D 2487)= - AASHTO (M 145)= -

Coefficients

D₉₀= 17.4787 D₈₅= 11.1581 D₆₀= 0.9526
D₅₀= 0.5194 D₃₀= 0.1623 D₁₅=
D₁₀= C_u= C_c=

Remarks

Date Received: 9/9/19 Date Tested: 9/9/19

Tested By: Eric Tavares

Checked By: Shalini Kanuganti

Title: Lab Manager

Location: Onsite
Sample Number: 3519-600

Date Sampled: 9/9/19

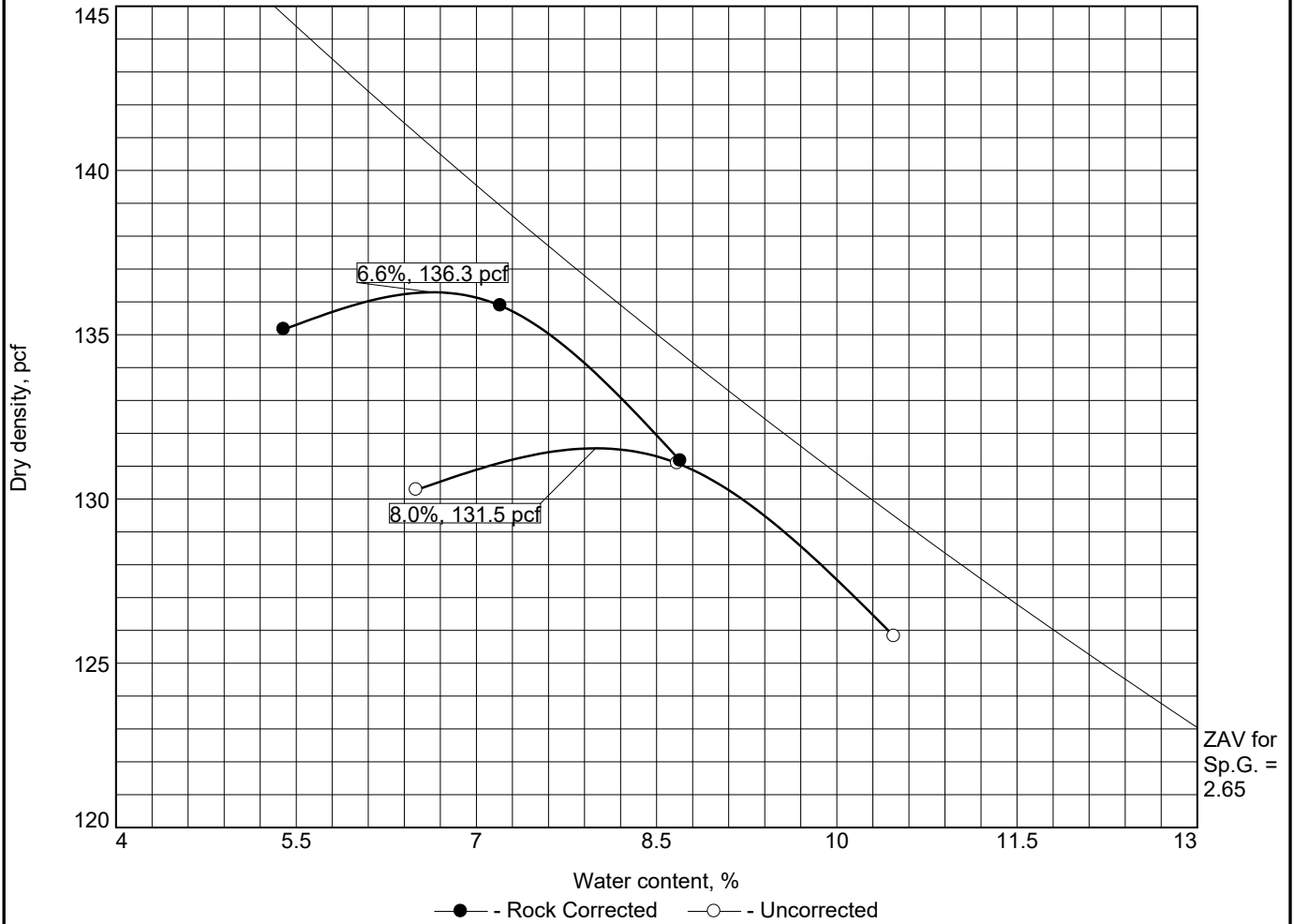


Client: Ludlow Construction Co. Inc.
Project: USACE Waterline Project - Durnham, CT

Project No: 19-75-012

Figure 600A

COMPACTION TEST REPORT



Test specification: ASTM D 1557-12 Method B Modified
 ASTM D4718-15 Oversize Corr. Applied to Each Test Point

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/8 in.	% < No.200
	USCS	AASHTO						
	-	-	-	2.65	-	-	17.0	22.0

ROCK CORRECTED TEST RESULTS	UNCORRECTED	MATERIAL DESCRIPTION
Maximum dry density = 136.3 pcf	131.5 pcf	Reddish brown silty sand with gravel
Optimum moisture = 6.6 %	8.0 %	

Project No. 19-75-012 Client: Ludlow Construction Co. Inc. Project: USACE Waterline Project - Durnham, CT <input type="checkbox"/> Location: Onsite Sample Number: 3519-600	Remarks:

Figure 600B

Tested By: Eric Tavares **Checked By:** Shalini Kanuganti