

R. W. Gillespie & Associates, Inc.

LETTER OF TRANSMITTAL

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Date:	11 August 2011	Project No.:	0557-014
Attention:	Mr. Cuyler Feagles (cmf@portlandmaine.gov)		
Re:	Laboratory Testing Terminal Enhancement, Portland Int. Jetport - Johnson Rd/Turnpike Connector Portland, Maine		

City of Portland, Portland Int. Jetport

1001 Westbrook Street

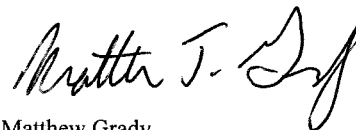
Portland, Maine 04102

We are sending you attached laboratory test results.

Laboratory No. (s)	Test (s) Performed
11984	Washed Gradation & MD
11985	Washed Gradation & MD

Remarks: Sample #11985 was slightly out of specification on the #200 sieve. It is our understanding that AMEC does not take exception to the use of sample #11985 as Maine DOT Type D gravel.

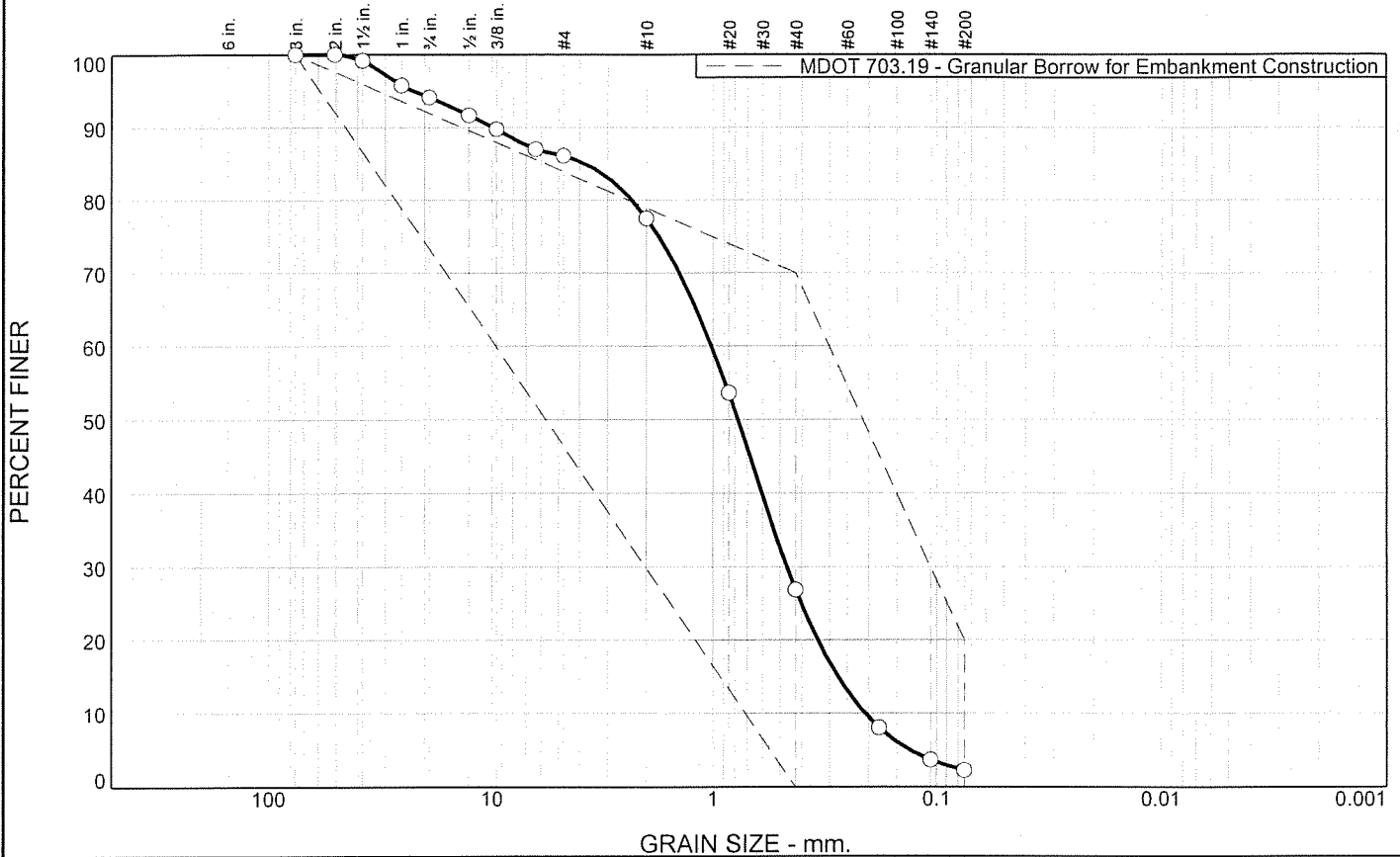
Copy To: Roy Williams: rsw@portlandmaine.gov
Arthur Laferrier: apj@portlandmaine.gov
Tim Michaud: tomothy.michaud@amec.com
Adam St. Michel: astmichel@shawbrothers.com



Signed: Matthew Grady

If enclosures are not as noted, kindly notify us at once.

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	5.8	8.1	8.6	50.6	24.7	2.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3"	100.0	100.0 - 100.0	
2"	100.0		
1 1/2"	99.2		
1"	95.8		
3/4"	94.2		
1/2"	91.7		
3/8"	89.8		
1/4"	87.0		
#4	86.1		
#10	77.5		
#20	53.7		
#40	26.9	0.0 - 70.0	
#80	8.1		
#140	3.7		
#200	2.2	0.0 - 20.0	

Soil Description
Granular Borrow - poorly graded sand

Atterberg Limits
 PL= LL= PI=

Coefficients
 D₈₅= 3.7628 D₆₀= 1.0164 D₅₀= 0.7723
 D₃₀= 0.4646 D₁₅= 0.2745 D₁₀= 0.2077
 C_u= 4.89 C_c= 1.02

Classification
 USCS= SP AASHTO=

Remarks
 Moisture Content: 1.3%
 93.0% passing the 3" screen based on the entire sample.

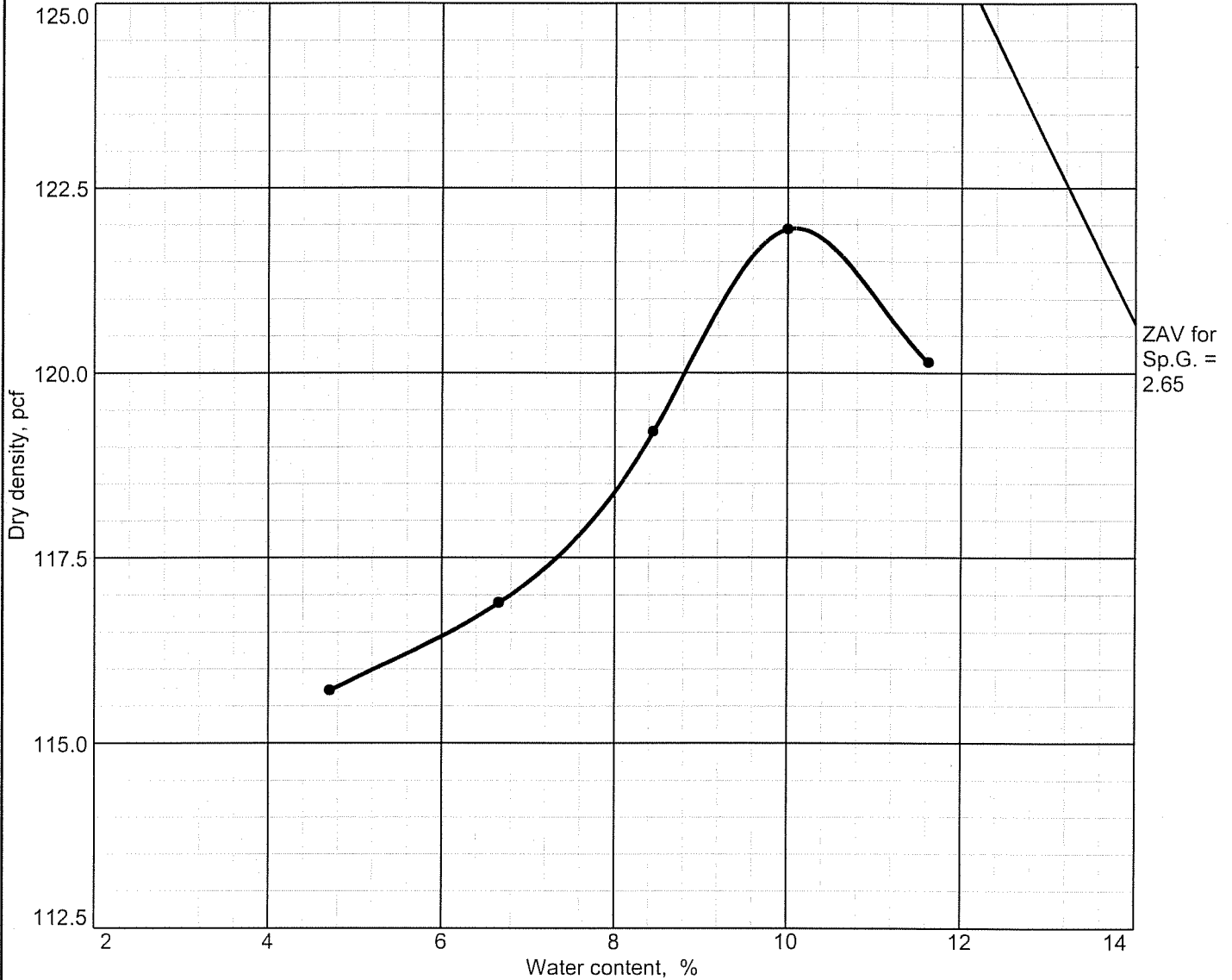
* MDOT 703.19 - Granular Borrow for Embankment Construction

Sample No.: 11984 Source of Sample: Shaw Bros. - H Pit Date: 8/10/2011
 Location: Stockpile Elev./Depth:

**R.W. Gillespie
& Associates, Inc.
Saco, Maine**

Client: City of Portland
 Project: Portland Int. Jetport - Johnson Rd / Turnpike Connector
 Project No: 0557-014 Lab No. 11984

Moisture-Density Test Report



ZAV for
Sp.G. =
2.65

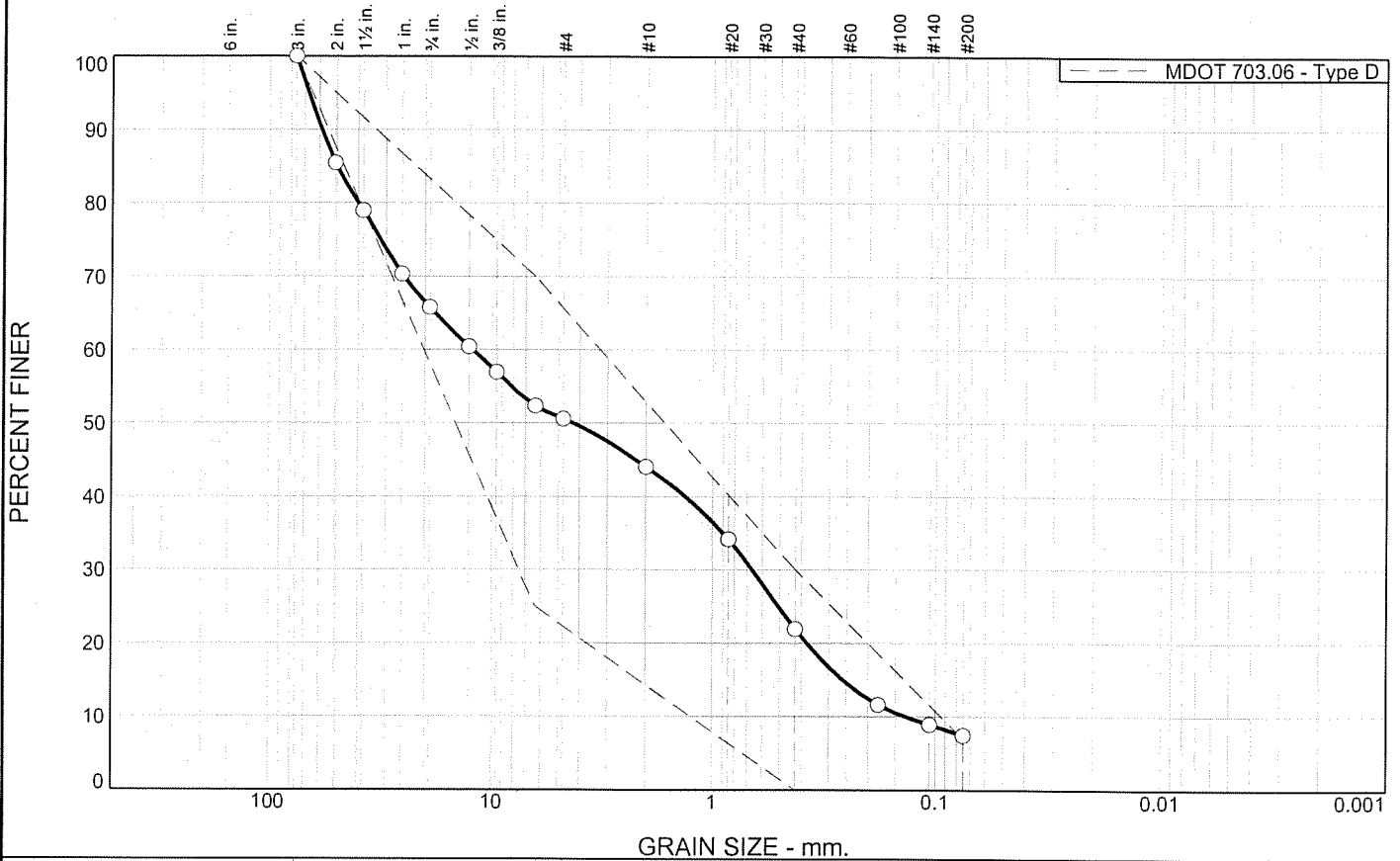
Test specification: ASTM D 1557-09 Method A Modified
Oversize correction applied to each point

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > No.4	% < No.200
	USCS	AASHTO						
	SP		1.3%				13.9	2.2

ROCK CORRECTED TEST RESULTS	MATERIAL DESCRIPTION
Maximum dry density = 122.0 pcf Optimum moisture = 10.1 %	Granular Borrow - poorly graded sand

Project No. 0557-014 Client: City of Portland Project: Portland Int. Jetport - Johnson Rd / Turnpike Connector Source: Shaw Bros. - H Pit Sample No.: 11984	Remarks: Tested By: DSD
R.W. Gillespie & Associates, Inc. Saco, Maine	 Lab No. 11984

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	34.2	15.2	6.5	22.2	14.5	7.4	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3"	100.0	100.0 - 100.0	
2"	85.5		
1 1/2"	79.0		
1"	70.3		
3/4"	65.8		
1/2"	60.4		
3/8"	57.0		
1/4"	52.3	25.0 - 70.0	
#4	50.6		
#10	44.1		
#20	34.2		
#40	21.9	0.0 - 30.0	
#80	11.6		
#140	8.9		
#200	7.4	0.0 - 7.0	X

Soil Description

Subbase Gravel - poorly graded gravel with silt and sand

Atterberg Limits

PL= LL= PI=

Coefficients

D₈₅= 49.8830 D₆₀= 12.2549 D₅₀= 4.2752
D₃₀= 0.6651 D₁₅= 0.2594 D₁₀= 0.1357
C_u= 90.34 C_c= 0.27

Classification

USCS= GP-GM AASHTO= A-1-a

Remarks

Moisture Content: 1.7%
100% passing the 6" screen and 96.6% passing the 3" screen based on the entire sample.

* MDOT 703.06 - Type D

Sample No.: 11985 Source of Sample: Shaw Bros. - B Pit Date: 8/11/2011
Location: Stockpile Elev./Depth:

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& Associates, Inc.
Saco, Maine**

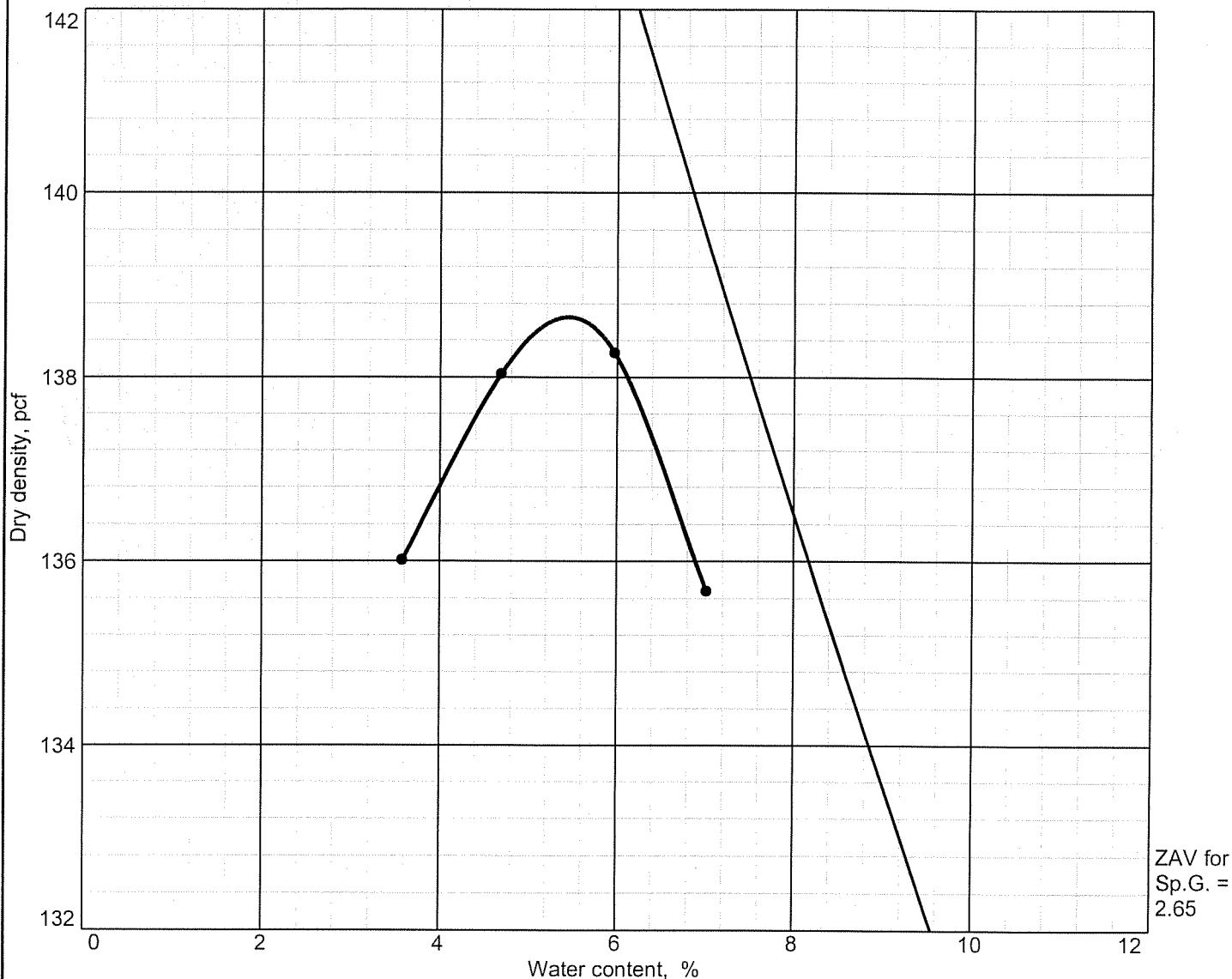
Client: City of Portland
Project: Portland Int. Jetport - Johnson Rd / Turnpike Connector

Project No: 0557-014 Lab No. 11985

Tested By: DSD/MAO

Checked By: MTG *MTG*

Moisture-Density Test Report



ZAV for Sp.G. = 2.65

Test specification: ASTM D 1557-09 Method C Modified
Oversize correction applied to each point

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/4 in.	% < No.200
	USCS	AASHTO						
	GP-GM	A-1-a	1.7%				34.2	7.4

ROCK CORRECTED TEST RESULTS	MATERIAL DESCRIPTION
Maximum dry density = 138.7 pcf Optimum moisture = 5.4 %	Subbase Gravel - poorly graded gravel with silt and sand

Project No. 0557-014 Client: City of Portland Project: Portland Int. Jetport - Johnson Rd / Turnpike Connector Source: Shaw Bros. - B Pit Sample No.: 11985	Remarks: Tested By: DSD
R.W. Gillespie & Associates, Inc. Saco, Maine	Lab No. 11985 <i>MTG</i>