



195 Frances Avenue
 Cranston RI, 02910
 Phone: (401)-467-6454
 Fax: (401)-467-2398
<http://www.thielsch.com>

Client Information:
Charter Contracting
 Boston, MA

PM: Paul Leofanti Jr.
 Assigned By: Paul Leofanti Jr.

Laboratory Information
 Project Name:
Textron Providence
 Providence, RI

TEI Project Number: CTS-74-15-0002.134
 Report Date: 10/6/2015

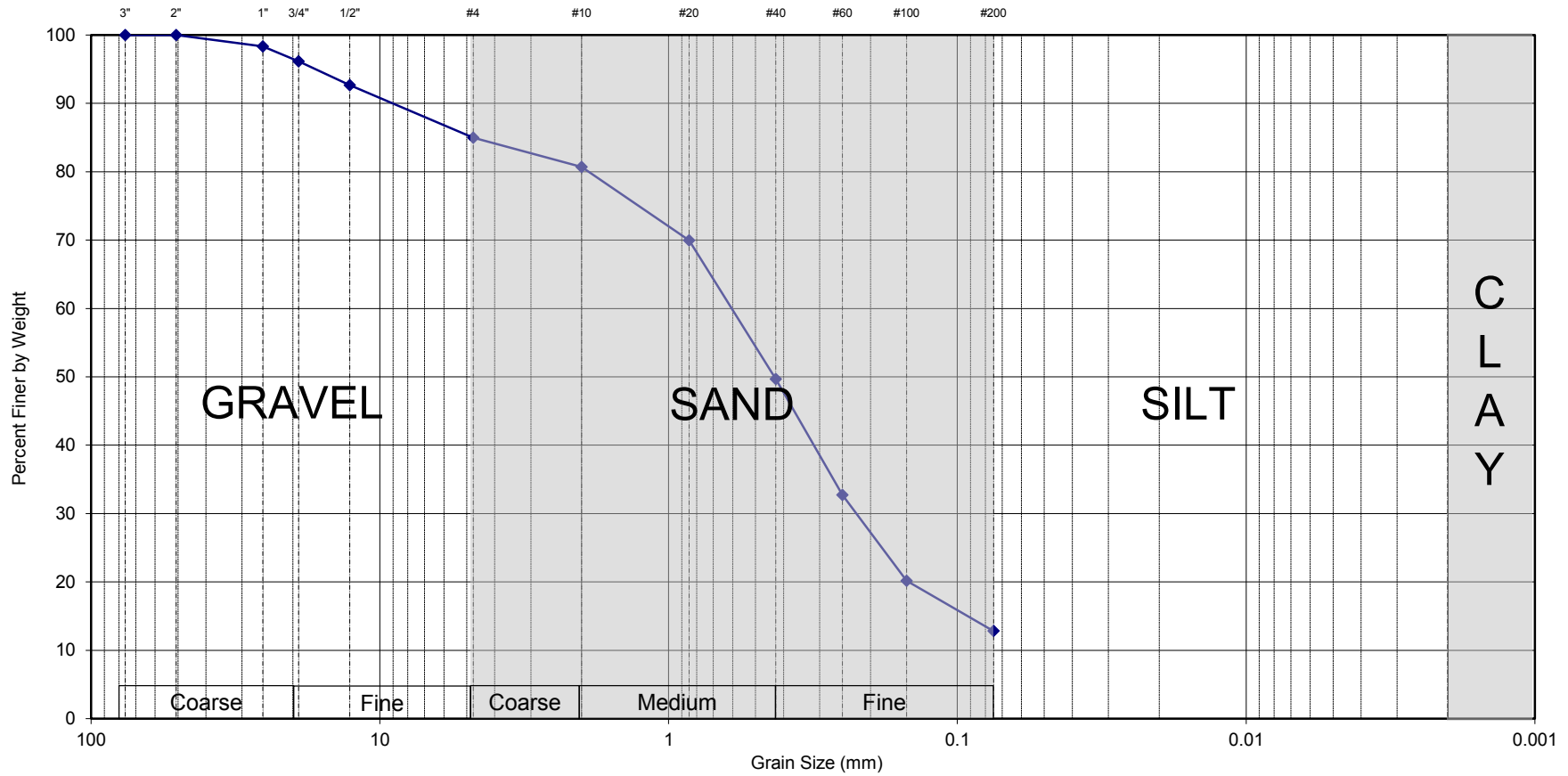
LABORATORY TESTING DATA SHEET

Source	Material	Sample	Lab No.	Water Content %	LL %	PL %	Sieve -200 %	Hyd -2μ %	ORG %	pH	Loose unit wt. pcf	γ_d MAX (pcf) W_{opt} (%)	γ_d MAX (pcf) W_{opt} (%) Corrected	CBR Dry unit wt. pcf	CBR @ 0.1" @ 0.2"	Laboratory Log and Soil Description
G. Lopes Raynham	20% Organic + Sand	#2	15-S-979	8.7			12.8		16.5							Brown Silty Sand with Gravel (SM)

Reviewed By 

Date Reviewed 10/6/2015

U.S. STANDARD SIEVE AND HYDROMETER



Gravel
15.0%

Sand
72.2%

Fines
12.8%

Lab #	Source	Material	Sample	Description	WC	LL	PL	PI
15-S-979	G Lopes	Topsoil+20%	with Sand	Brown Silty Sand with Gravel (SM)				

Gravel		Sand	
Sieve Size	% Passing	Sieve Size	% Passing
4"	100.0	#10	80.7
3"	100.0	#20	70.0
2"	100.0	#40	49.7
1"	98.3	#60	32.7
3/4"	96.2	#100	20.2
1/2"	92.7	#200	12.8
#4	85.0		



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G. Lopes Raynham	20% Organic + Sand	#1	15-S-978	6.5			15.8		16.7							Brown Silty Sand with Gravel (SM)

Reviewed By 

Date Reviewed 10/6/2015

U.S. STANDARD SIEVE AND HYDROMETER



Gravel
26.6%

Sand
57.6%

Fines
15.8%

Lab #	Source	Material	Sample	Description	WC	LL	PL	PI
15-S-978	G Lopes	Topsoil+20%	with Sand	Brown Silty Sand with Gravel (SM)				

Gravel		Sand	
Sieve Size	% Passing	Sieve Size	% Passing
4"	100.0	#10	67.1
3"	100.0	#20	58.7
2"	100.0	#40	45.4
1"	95.9	#60	33.3
3/4"	92.6	#100	23.0
1/2"	88.7	#200	15.8
#4	73.4		



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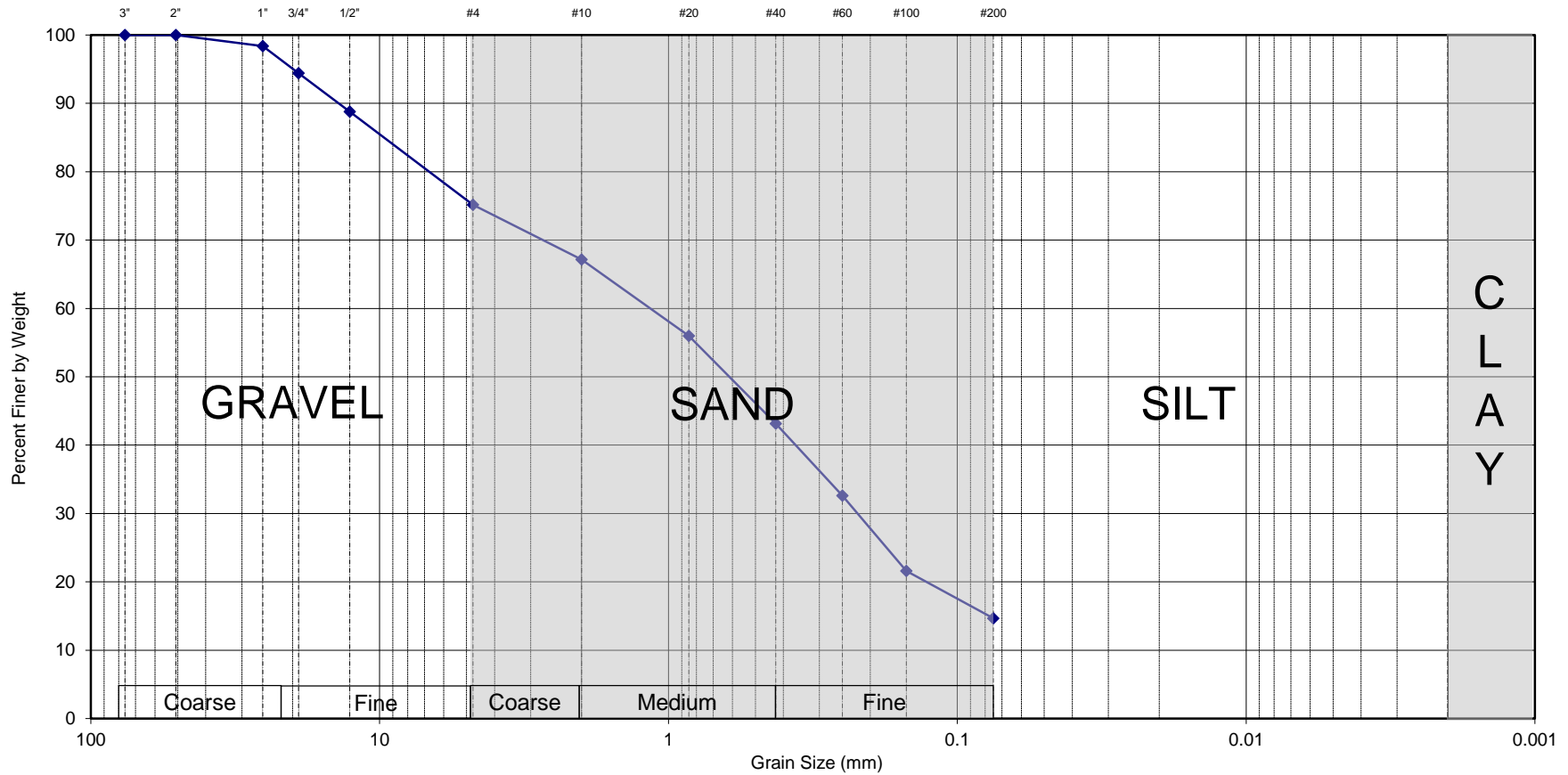
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G. Lopes Raynham	20% Organic	#4	15-S-1034	13.6			14.7		18.2							Brown Silty Sand with Gravel (SM)

Reviewed By Matthew Pyle

Date Reviewed 10/14/2015

U.S. STANDARD SIEVE AND HYDROMETER



Gravel
24.8%

Sand
60.5%

Fines
14.7%

Lab #	Source	Material	Sample	Description	WC	LL	PL	PI
15-S-1034	Lopes-Raynham	Topsoil+20%	4	Brown Silty Sand with Gravel (SM)				

Gravel		Sand	
Sieve Size	% Passing	Sieve Size	% Passing
4"	100.0	#10	67.1
3"	100.0	#20	56.0
2"	100.0	#40	43.2
1"	98.4	#60	32.6
3/4"	94.4	#100	21.6
1/2"	88.8	#200	14.7
#4	75.2		



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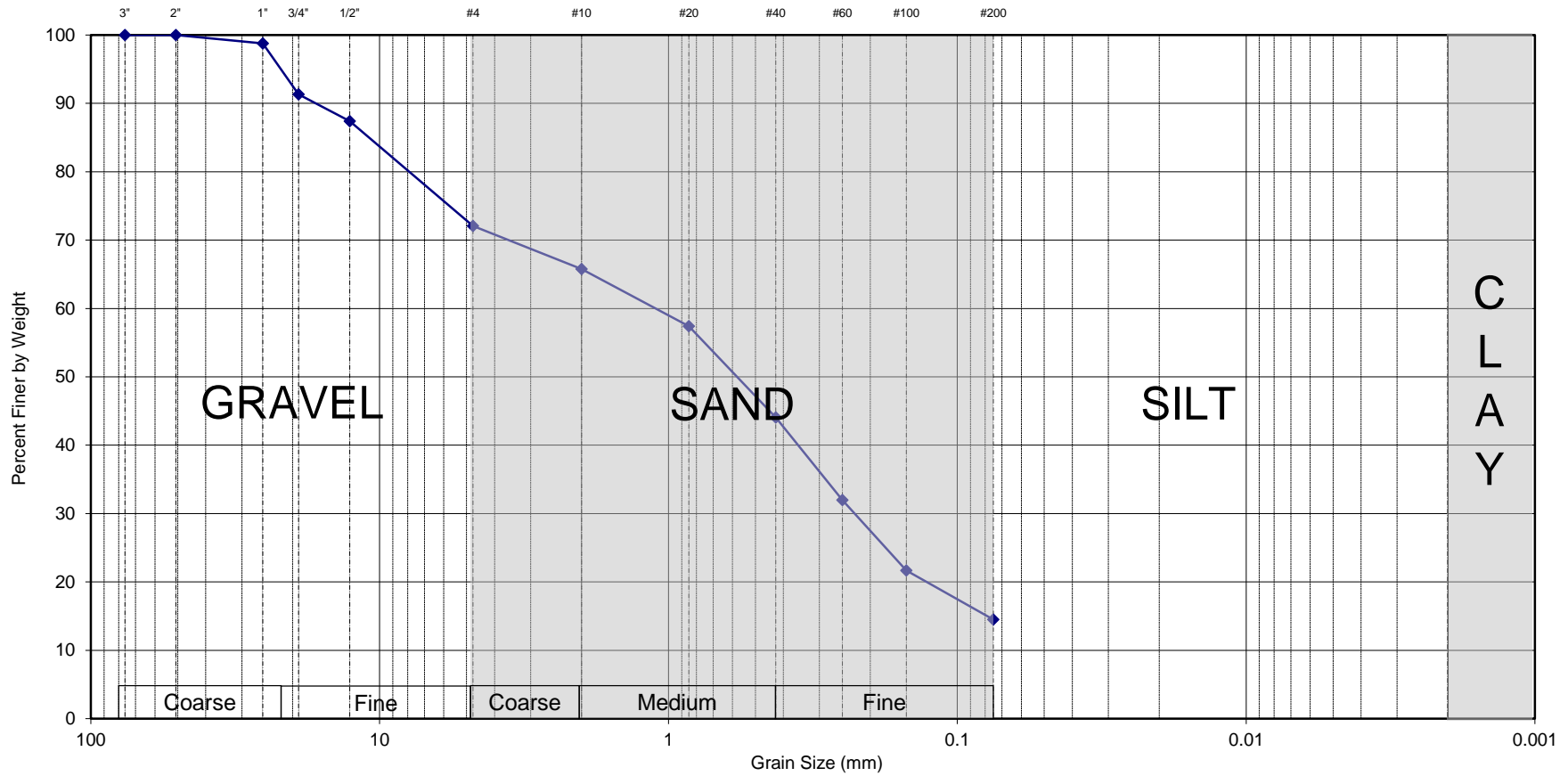
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Source	Material	Sample	Lab No.	Water Content %	LL %	PL %	Sieve -200 %	Hyd -2μ %	ORG %	pH	Loose unit wt. pcf	γ_d MAX (pcf) W_{opt} (%)	γ_d MAX (pcf) W_{opt} (%) Corrected	CBR Dry unit wt. pcf	CBR @ 0.1" @ 0.2"	Laboratory Log and Soil Description
G. Lopes Raynham	20% Organic	#1	15-S-1031	11.6			14.5		17.9							Brown Silty Sand with Gravel (SM)

Reviewed By 

Date Reviewed 10/14/2015

U.S. STANDARD SIEVE AND HYDROMETER



Gravel
27.9%

Sand
57.6%

Fines
14.5%

Lab #	Source	Material	Sample	Description	WC	LL	PL	PI
15-S-1031	Lopes-Raynham	Topsoil+20%	1	Brown Silty Sand with Gravel (SM)				

Gravel		Sand	
Sieve Size	% Passing	Sieve Size	% Passing
4"	100.0	#10	65.8
3"	100.0	#20	57.4
2"	100.0	#40	44.1
1"	98.8	#60	32.0
3/4"	91.3	#100	21.7
1/2"	87.4	#200	14.5
#4	72.1		

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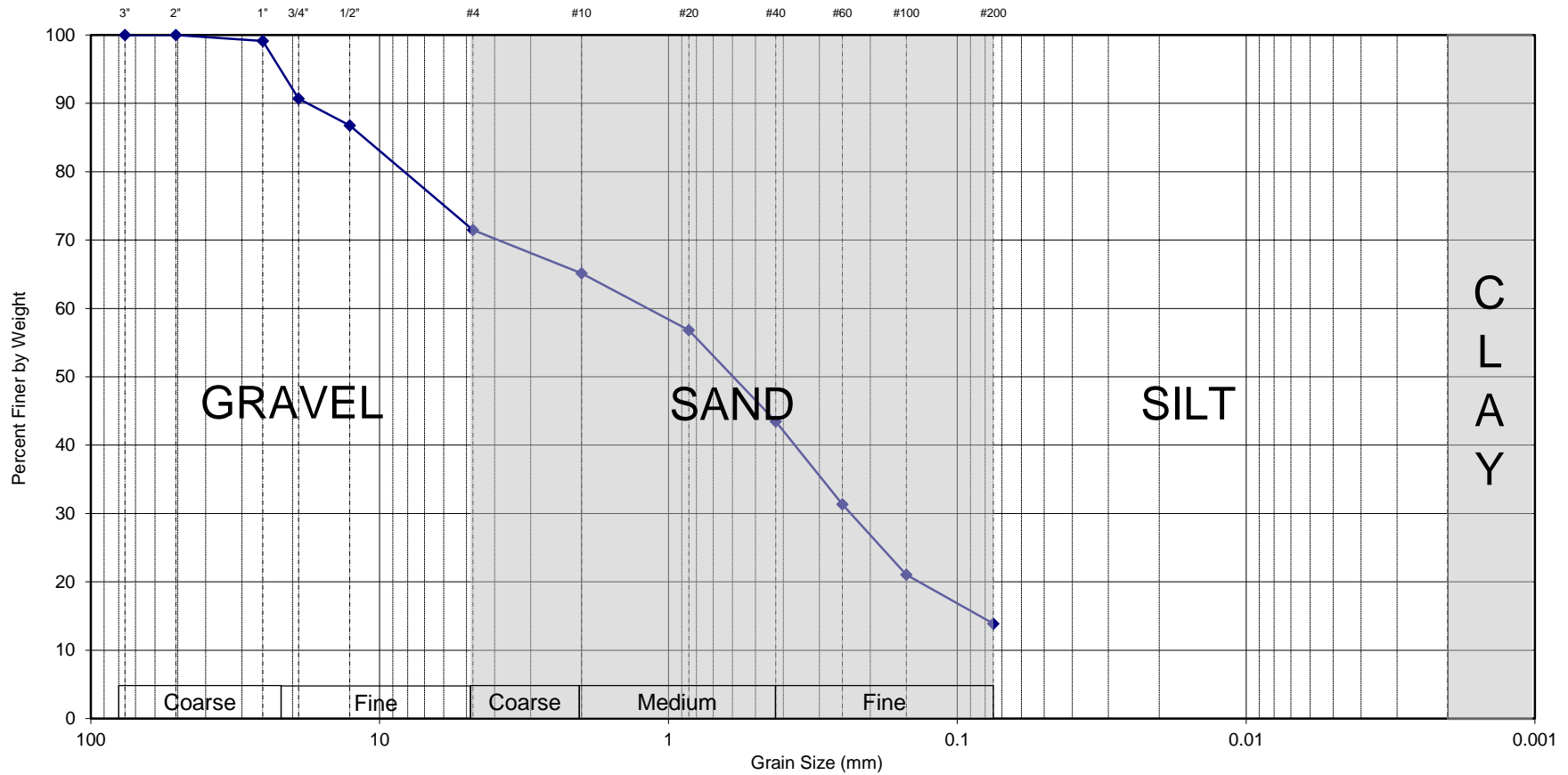
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G. Lopes Raynham	20% Organic	#2	15-S-1032	12.4			13.9		18.1							Brown Silty Sand with Gravel (SM)

Reviewed By 

Date Reviewed 10/14/2015

U.S. STANDARD SIEVE AND HYDROMETER



Gravel
28.5%

Sand
57.6%

Fines
13.9%

Lab #	Source	Material	Sample	Description	WC	LL	PL	PI
15-S-1032	Lopes-Raynham	Topsoil+20%	2	Brown Silty Sand with Gravel (SM)				

Gravel		Sand	
Sieve Size	% Passing	Sieve Size	% Passing
4"	100.0	#10	65.1
3"	100.0	#20	56.8
2"	100.0	#40	43.4
1"	99.1	#60	31.4
3/4"	90.7	#100	21.1
1/2"	86.8	#200	13.9
#4	71.5		



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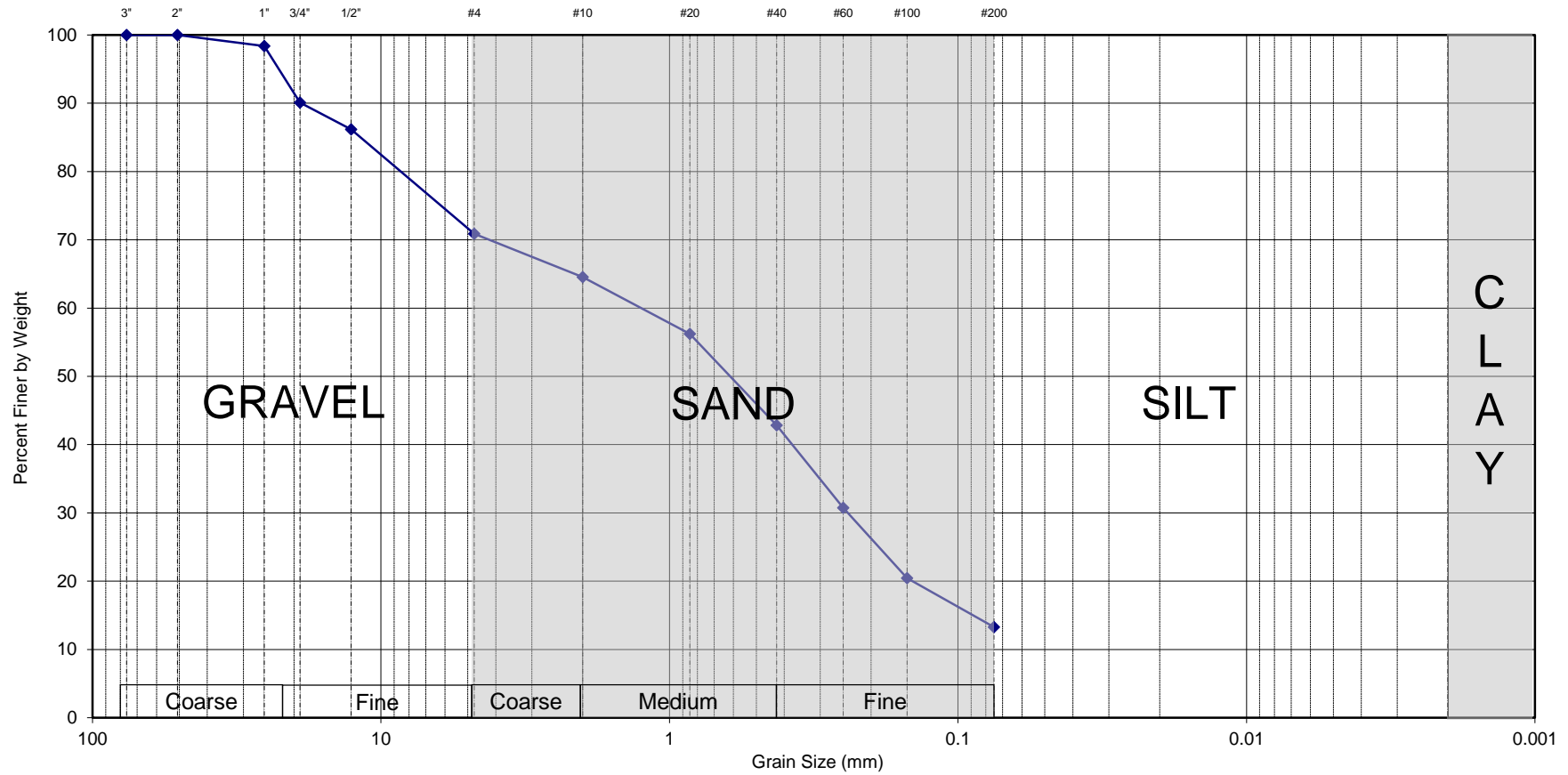
LABORATORY TESTING DATA SHEET

Source	Material	Sample	Lab No.	Water Content %	LL %	PL %	Sieve -200 %	Hyd -2μ %	ORG %	pH	Loose unit wt. pcf	γ_d MAX (pcf) W_{opt} (%)	γ_d MAX (pcf) W_{opt} (%) Corrected	CBR Dry unit wt. pcf	CBR @ 0.1" @ 0.2"	Laboratory Log and Soil Description
G. Lopes Raynham	20% Organic	#3	15-S-1033	12.0			13.3		17.5							Brown Silty Sand with Gravel (SM)

Reviewed By 

Date Reviewed 10/14/2015

U.S. STANDARD SIEVE AND HYDROMETER



Gravel
29.1%

Sand
57.6%

Fines
13.3%

Lab #	Source	Material	Sample	Description	WC	LL	PL	PI
15-S-1033	Lopes-Raynham	Topsoil+20%	3	Brown Silty Sand with Gravel (SM)				

Gravel		Sand	
Sieve Size	% Passing	Sieve Size	% Passing
4"	100.0	#10	64.5
3"	100.0	#20	56.2
2"	100.0	#40	42.8
1"	98.4	#60	30.7
3/4"	90.1	#100	20.4
1/2"	86.2	#200	13.3
#4	70.9		



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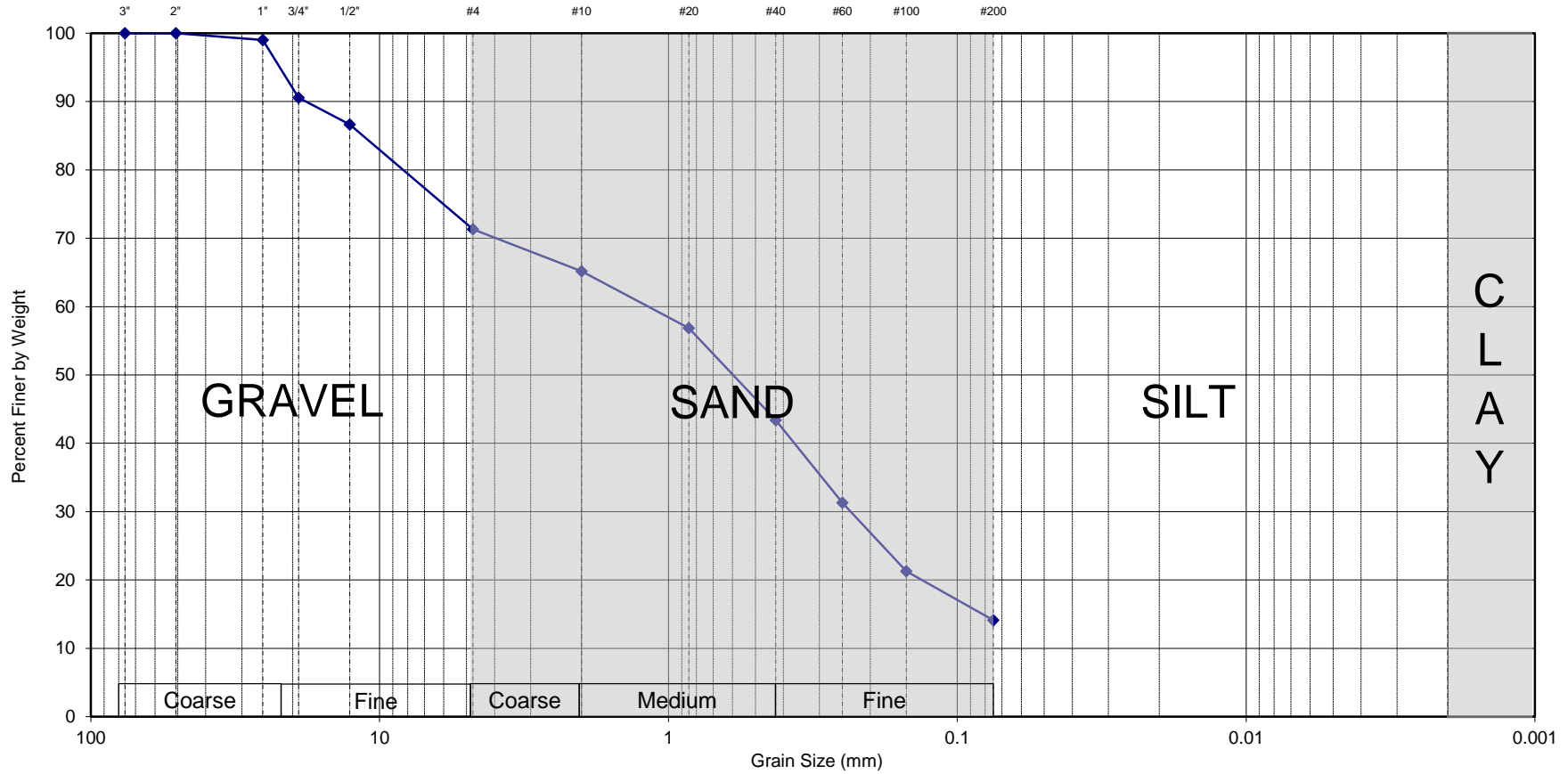
LABORATORY TESTING DATA SHEET

Source	Material	Sample	Lab No.	Water Content %	LL %	PL %	Sieve -200 %	Hyd -2μ %	ORG %	pH	Loose unit wt. pcf	γ_d MAX (pcf) W_{opt} (%)	γ_d MAX (pcf) W_{opt} (%) Corrected	CBR Dry unit wt. pcf	CBR @ 0.1" @ 0.2"	Laboratory Log and Soil Description
G. Lopes Raynham	20% Organic	D	15-S-1056	12.7			14.1		18.7							Brown Silty Sand with Gravel (SM)

Reviewed By 

Date Reviewed 10/19/2015

U.S. STANDARD SIEVE AND HYDROMETER



Gravel
28.7%

Sand
57.2%

Fines
14.1%

Lab #	Source	Material	Sample	Description	WC	LL	PL	PI
15-S-1056	Lopes-Raynham	Topsoil+20%	D	Brown Silty Sand with Gravel (SM)				

Gravel		Sand	
Sieve Size	% Passing	Sieve Size	% Passing
4"	100.0	#10	65.2
3"	100.0	#20	56.8
2"	100.0	#40	43.4
1"	99.0	#60	31.3
3/4"	90.6	#100	21.3
1/2"	86.6	#200	14.1
#4	71.3		



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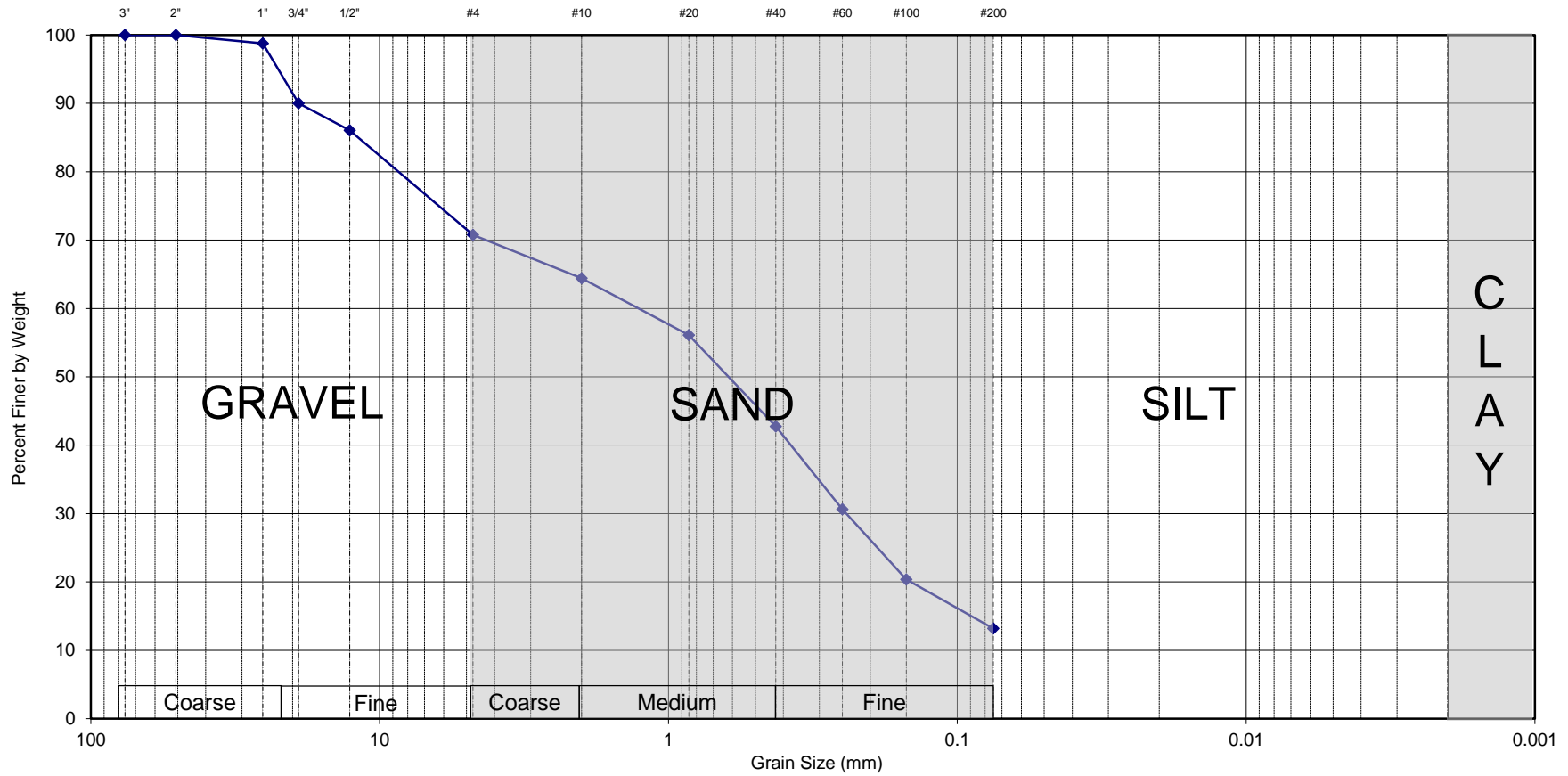
LABORATORY TESTING DATA SHEET

Source	Material	Sample	Lab No.	Water Content %	LL %	PL %	Sieve -200 %	Hyd -2μ %	ORG %	pH	Loose unit wt. pcf	γ_d MAX (pcf) W_{opt} (%)	γ_d MAX (pcf) W_{opt} (%) Corrected	CBR Dry unit wt. pcf	CBR @ 0.1" @ 0.2"	Laboratory Log and Soil Description
G. Lopes Raynham	20% Organic	A	15-S-1053	14.1			13.2		17.9							Brown Silty Sand with Gravel (SM)

Reviewed By 

Date Reviewed 10/19/2015

U.S. STANDARD SIEVE AND HYDROMETER



Gravel
29.2%

Sand
57.6%

Fines
13.2%

Lab #	Source	Material	Sample	Description	WC	LL	PL	PI
15-S-1053	Lopes-Raynham	Topsoil+20%	A	Brown Silty Sand with Gravel (SM)				

Gravel		Sand	
Sieve Size	% Passing	Sieve Size	% Passing
4"	100.0	#10	64.4
3"	100.0	#20	56.1
2"	100.0	#40	42.7
1"	98.8	#60	30.6
3/4"	90.0	#100	20.3
1/2"	86.1	#200	13.2
#4	70.8		



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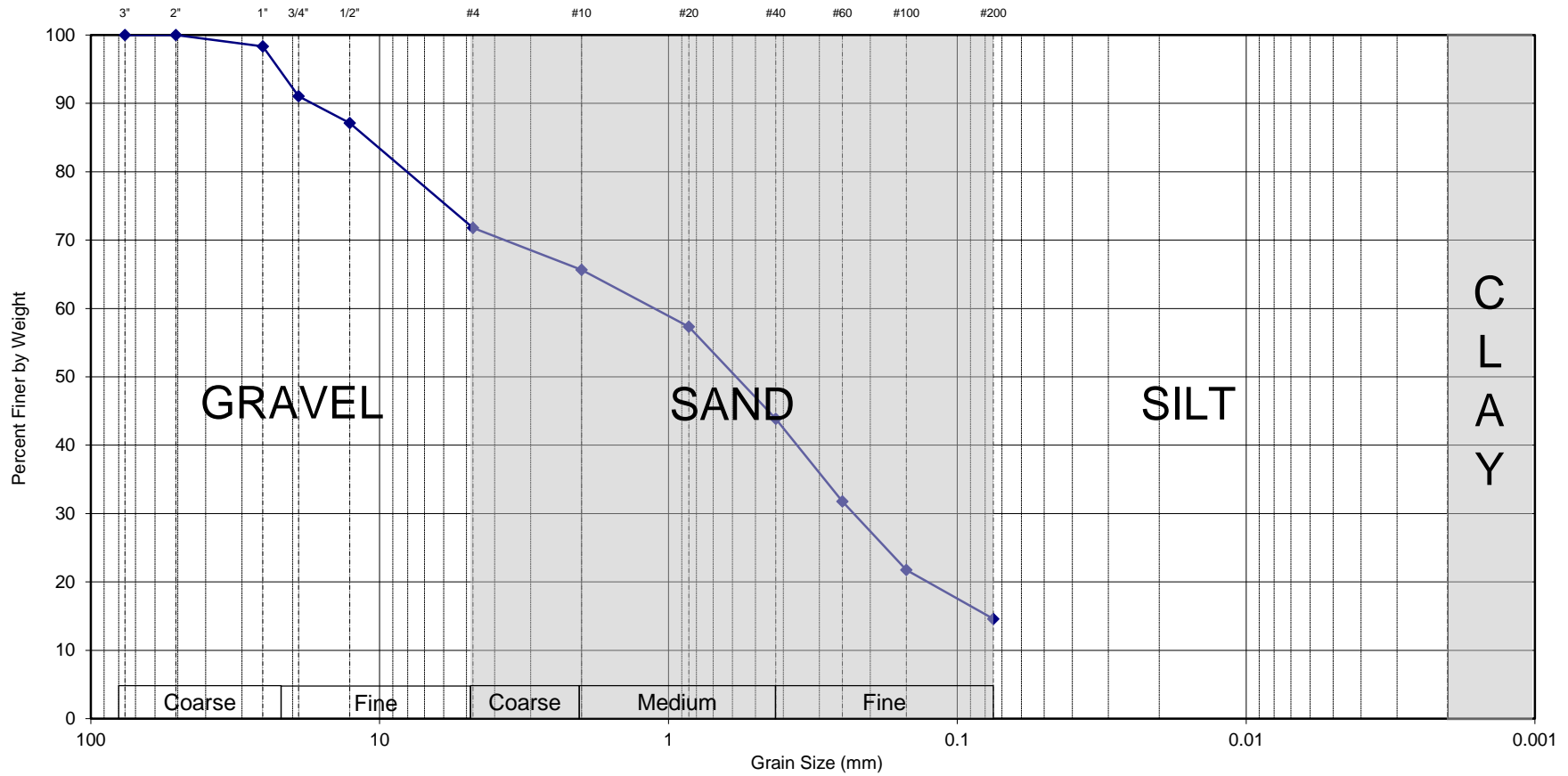
LABORATORY TESTING DATA SHEET

Source	Material	Sample	Lab No.	Water Content %	LL %	PL %	Sieve -200 %	Hyd -2μ %	ORG %	pH	Loose unit wt. pcf	γ_d MAX (pcf) W_{opt} (%)	γ_d MAX (pcf) W_{opt} (%) Corrected	CBR Dry unit wt. pcf	CBR @ 0.1" @ 0.2"	Laboratory Log and Soil Description
G. Lopes Raynham	20% Organic	X	15-S-1072	12.8			14.6		18.8							Brown Silty Sand with Gravel (SM)

Reviewed By 

Date Reviewed 10/28/2015

U.S. STANDARD SIEVE AND HYDROMETER



Gravel
28.2%

Sand
57.2%

Fines
14.6%

Lab #	Source	Material	Sample	Description	WC	LL	PL	PI
15-S-1072	Lopes-Raynham	Topsoil+20%	X	Brown Silty Sand with Gravel (SM)				

Gravel		Sand	
Sieve Size	% Passing	Sieve Size	% Passing
4"	100.0	#10	65.7
3"	100.0	#20	57.3
2"	100.0	#40	43.9
1"	98.4	#60	31.8
3/4"	91.0	#100	21.8
1/2"	87.1	#200	14.6
#4	71.8		



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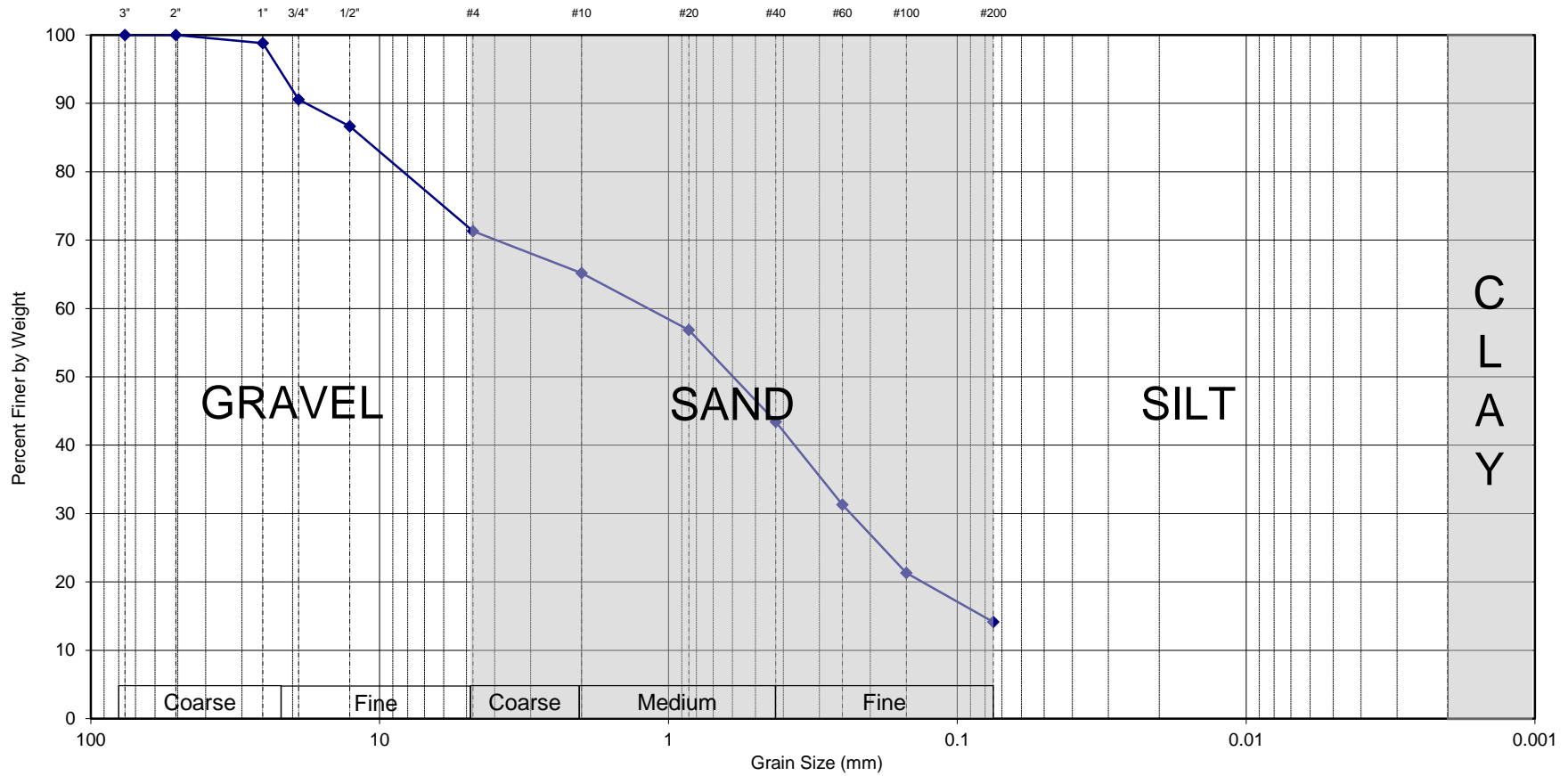
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Source	Material	Sample	Lab No.	Water Content %	LL %	PL %	Sieve -200 %	Hyd -2μ %	ORG %	pH	Loose unit wt. pcf	γ_d MAX (pcf) W_{opt} (%)	γ_d MAX (pcf) W_{opt} (%) Corrected	CBR Dry unit wt. pcf	CBR @ 0.1" @ 0.2"	Laboratory Log and Soil Description
G. Lopes Raynham	20% Organic	Y	15-S-1073	13.0			14.1		19.2							Brown Silty Sand with Gravel (SM)

Reviewed By 

Date Reviewed 10/28/2015

U.S. STANDARD SIEVE AND HYDROMETER



Gravel
28.7%

Sand
57.2%

Fines
14.1%

Lab #	Source	Material	Sample	Description	WC	LL	PL	PI
15-S-1073	Lopes-Raynham	Topsoil+20%	Y	Brown Silty Sand with Gravel (SM)				

Gravel		Sand	
Sieve Size	% Passing	Sieve Size	% Passing
4"	100.0	#10	65.2
3"	100.0	#20	56.9
2"	100.0	#40	43.4
1"	98.8	#60	31.3
3/4"	90.6	#100	21.3
1/2"	86.6	#200	14.1
#4	71.3		

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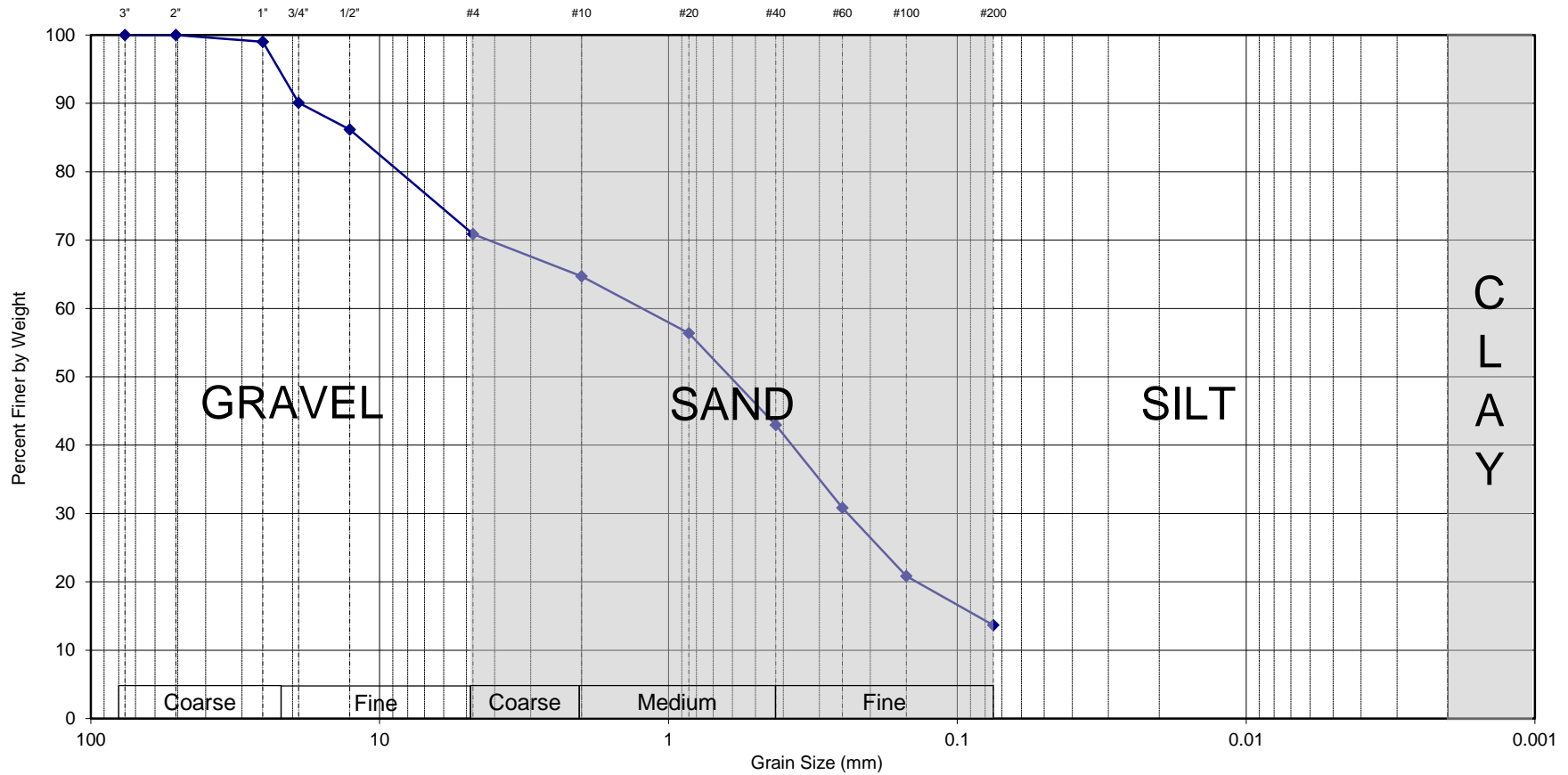
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G. Lopes Raynham	20% Organic	Z	15-S-1074	12.7			13.7		19.1							Brown Silty Sand with Gravel (SM)

Reviewed By 

Date Reviewed 10/28/2015

U.S. STANDARD SIEVE AND HYDROMETER



Gravel
29.1%

Sand
57.2%

Fines
13.7%

Lab #	Source	Material	Sample	Description	WC	LL	PL	PI
15-S-1074	Lopes-Raynham	Topsoil+20%	Z	Brown Silty Sand with Gravel (SM)				

Gravel		Sand	
Sieve Size	% Passing	Sieve Size	% Passing
4"	100.0	#10	64.7
3"	100.0	#20	56.4
2"	100.0	#40	42.9
1"	99.0	#60	30.8
3/4"	90.1	#100	20.8
1/2"	86.2	#200	13.7
#4	70.9		



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