Vendor:	J.H. LYNCH	Lab No:	20160006
Source:	FIRST ST. QUARRY	Location:	CUMBERLAND, RI

#### **AASHTO T-27**

% Passing

8	2"	1 1/2"	1"	3/4"	1/2"	3/8''	#4	#8
CA Size:3/4	100.0	100.0	100.0	99.2	12.4	1.7	0.8	0.7
CA Size:1/2	100.0	100.0	100.0	100.0	71.6	11.2	0.7	0.6
CA Size:3/8	100.0	100.0	100.0	100.0	100.0	98.8	25.4	1.1
CA Size:								

# **Unit Weight and Void in Aggregate**

#### **AASHTO T-19**

Compacted

Nominal Aggregate Size:	1 1/2"	1''	3/4''	1/2''	3/8''
Unit Weight: (lbs./cu. ft.)			104.81	101.84	108.79

Loose

Nominal Aggregate Size:	1 1/2"	1''	3/4''	1/2''	3/8''
Unit Weight: (lbs./cu. ft.)					

# Resistance to Abrasion of CA by use of the LA Machine AASHTO T-96

	LA Type	LA Result
Run # 1	В	12.35

#### Specific Gravity and Absorption of Coarse Aggregate AASHTO T-85

Nominal Aggregate Size:	# 4	3/8''	1/2"	3/4''	1"	1 1/2"
Bulk Specific Gravity:		3.070	2.952	2.950		
Specific Gravity (SSD):		3.081	2.961	2.957		
<b>Apparent Specific Gravity:</b>		3.103	2.978	2.969		
Absorption:		0.353	0.297	0.217		

# Soundness of Aggregate by Use of Sodium Sulfate

#### **AASHTO T-104**

Sieve Size:	2" - 1 1/2"	1 1/2" - 1"	1" - 3/4"	3/4" - 1/2"	1/2" - 3/8"	3/8'' - # 4	#4-#8
% Loss:				0.28	0.45		

# Amount of Material Finer than # 200 Sieve in Aggregate AASHTO T-11

Aggregate Bin Size	1 1/2"	1''	3/4''	1/2''	3/8''	# 4
% Passing # 200 sieve						

Vendor:	CARDI CORP	Lab No:	20160008
Source:	ARNOLD RD/NEW LONDON	Location:	COVENTRY, RI

#### **AASHTO T-27**

% Passing

8	2"	1 1/2"	1"	3/4"	1/2''	3/8''	#4	#8
CA Size:3/4	100.0	100.0	100.0	99.0	28.2	10.8	4.1	3.0
CA Size:1/2	100.0	100.0	100.0	100.0	49.6	6.8	1.1	0.9
CA Size:3/8	100.0	100.0	100.0	100.0	100.0	93.6	36.4	15.8
CA Size:								

# **Unit Weight and Void in Aggregate**

#### **AASHTO T-19**

Compacted

	*	3/8''
97.3	8 91.44	103.85
	97.3	97.38 91.44

Loose

Nominal Aggregate Size:	1 1/2"	1"	3/4''	1/2''	3/8''
Unit Weight: (lbs./cu. ft.)					

# Resistance to Abrasion of CA by use of the LA Machine AASHTO T-96

	LA Type	LA Result
Run # 1	В	40.57

# Specific Gravity and Absorption of Coarse Aggregate AASHTO T-85

Nominal Aggregate Size:	# 4	3/8''	1/2"	3/4"	1"	1 1/2"
Bulk Specific Gravity:		2.608	2.609	2.610		
Specific Gravity (SSD):		2.625	2.623	2.623		
<b>Apparent Specific Gravity:</b>		2.653	2.645	2.644		
Absorption:		0.639	0.516	0.485		

# Soundness of Aggregate by Use of Sodium Sulfate

#### **AASHTO T-104**

Sieve Size:	2" - 1 1/2"	1 1/2" - 1"	1" - 3/4"	3/4" - 1/2"	1/2" - 3/8"	3/8'' - # 4	#4-#8
% Loss:				0.01	0.03		

# Amount of Material Finer than # 200 Sieve in Aggregate AASHTO T-11

Aggregate Bin Size	1 1/2"	1''	3/4''	1/2"	3/8"	# 4
% Passing # 200 sieve						

Vendor:	PJ KEATING	Lab No:	20160009
Source:	PHENIX AVENUE QUARRY	Location:	CRANSTON, RI

Sieve Analysis of	<b>Coarse Aggregate</b>
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**AASHTO T-27** 

% Passing

	2"	1 1/2"	1"	3/4''	1/2''	3/8''	#4	#8
CA Size:3/4	100.0	100.0	100.0	95.6	24.7	6.3	1.9	1.5
CA Size:1/2	100.0	100.0	100.0	100.0	87.2	39.6	5.2	3.4
CA Size:3/8	100.0	100.0	100.0	100.0	99.4	90.0	37.7	10.7
CA Size:								

# Unit Weight and Void in Aggregate

**AASHTO T-19** 

Compacted

Nominal Aggregate Size:	1 1/2"	1''	3/4''	1/2"	3/8''
Unit Weight: (lbs./cu. ft.)			97.38	98.87	98.91

Loose

Nominal Aggregate Size:	1 1/2"	1''	3/4''	1/2''	3/8''
Unit Weight: (lbs./cu. ft.)					

# Resistance to Abrasion of CA by use of the LA Machine AASHTO T-96

LA Result LA Type

Run # 1 29.76

# Specific Gravity and Absorption of Coarse Aggregate AASHTO T-85

Nominal Aggregate Size:	# 4	3/8''	1/2"	3/4"	1"	1 1/2"
Bulk Specific Gravity:		2.654	2.697	2.644		
Specific Gravity (SSD):		2.669	2.708	2.658		
<b>Apparent Specific Gravity:</b>		2.694	2.727	2.681		
Absorption:		0.562	0.405	0.527		

# **Soundness of Aggregate by Use of Sodium Sulfate**

#### **AASHTO T-104**

Sieve Size:	2" - 1 1/2"	1 1/2" - 1"	1" - 3/4"	3/4" - 1/2"	1/2" - 3/8"	3/8'' - # 4	#4-#8
% Loss:				0.16	0.18		

# Amount of Material Finer than # 200 Sieve in Aggregate AASHTO T-11

Aggregate Bin Size	1 1/2"	1''	3/4"	1/2"	3/8"	# 4
% Passing # 200 sieve						

Vendor:	MATERIALS S and S	Lab No:	20160012
Source:	POUND HILL RD. QUARRY	Location:	N. SMITHFIELD, RI

# **AASHTO T-27**

% Passing

	2''	1 1/2"	1"	3/4''	1/2''	3/8''	#4	#8
CA Size:3/4	100.0	100.0	100.0	80.6	8.0	2.2	1.2	1.1
CA Size:1/2	100.0	100.0	100.0	100.0	86.5	31.4	3.8	2.2
CA Size:3/8	100.0	100.0	100.0	100.0	99.4	94.6	19.6	3.0
CA Size:								

## **Unit Weight and Void in Aggregate**

#### **AASHTO T-19**

Compacted

Nominal Aggregate Size:	1 1/2"	1''	3/4''	1/2''	3/8''
Unit Weight: (lbs./cu. ft.)			92.93	92.93	93.98

Loose

Nominal Aggregate Size:	1 1/2"	1''	3/4''	1/2''	3/8''
Unit Weight: (lbs./cu. ft.)					

# Resistance to Abrasion of CA by use of the LA Machine AASHTO T-96

	LA Type	LA Result
Run # 1	В	34.97

# Specific Gravity and Absorption of Coarse Aggregate AASHTO T-85

Nominal Aggregate Size:	# 4	3/8''	1/2"	3/4"	1"	1 1/2"
Bulk Specific Gravity:		2.628	2.619	2.611		
Specific Gravity (SSD):		2.647	2.637	2.628		
<b>Apparent Specific Gravity:</b>		2.679	2.668	2.656		
Absorption:		0.733	0.706	0.650		

# Soundness of Aggregate by Use of Sodium Sulfate AASHTO T-104

Sieve Size:	2" - 1 1/2"	1 1/2" - 1"	1" - 3/4"	3/4" - 1/2"	1/2" - 3/8"	3/8'' - # 4	#4-#8
% Loss:				0.53	1.11		

# Amount of Material Finer than # 200 Sieve in Aggregate AASHTO T-11

Aggregate Bin Size	1 1/2"	1''	3/4''	1/2"	3/8"	# 4
% Passing # 200 sieve						

Vendor:	DRY BRIDGE S and S	Lab No:	20160013
Source:	SLOCUM PIT	Location:	NORTH KINGSTOWN, RI

#### **AASHTO T-27**

% Passing

	2''	1 1/2"	1''	3/4''	1/2''	3/8''	#4	#8
CA Size:3/4	100.0	100.0	99.2	75.3	4.0	1.0	0.8	0.7
CA Size:1/2	100.0	100.0	100.0	99.8	72.8	15.6	2.3	1.6
CA Size:3/8	100.0	100.0	100.0	100.0	99.7	86.1	18.7	3.9
CA Size:								

# **Unit Weight and Void in Aggregate**

#### **AASHTO T-19**

Compacted

Nominal Aggregate Size:	1 1/2"	1''	3/4''	1/2''	3/8''
Unit Weight: (lbs./cu. ft.)			95.90	94.41	98.91

Loose

Nominal Aggregate Size:	1 1/2"	1''	3/4''	1/2''	3/8''
Unit Weight: (lbs./cu. ft.)					_

# Resistance to Abrasion of CA by use of the LA Machine AASHTO T-96

	LA Type	LA Result		
Run # 1	В	36.20		

# Specific Gravity and Absorption of Coarse Aggregate AASHTO T-85

Nominal Aggregate Size:	# 4	3/8''	1/2"	3/4"	1"	1 1/2"
Bulk Specific Gravity:		2.626	2.622	2.626		
Specific Gravity (SSD):		2.651	2.643	2.643		
<b>Apparent Specific Gravity:</b>		2.693	2.677	2.672		
Absorption:		0.937	0.782	0.657		

# Soundness of Aggregate by Use of Sodium Sulfate

#### **AASHTO T-104**

Sieve Size:	2" - 1 1/2"	1 1/2" - 1"	1" - 3/4"	3/4" - 1/2"	1/2" - 3/8"	3/8'' - # 4	#4-#8
% Loss:				0.12	0.15		

# Amount of Material Finer than # 200 Sieve in Aggregate AASHTO T-11

Aggregate Bin Size	1 1/2"	1''	3/4''	1/2''	3/8''	# 4
% Passing # 200 sieve						

Vendor:	LYNCH - TIVERTON	Lab No: 20160017	-
Source:	FISH ROAD QUARRY	Location: TIVERTON, RI	

#### **AASHTO T-27**

% Passing

_	2''	1 1/2"	1"	3/4''	1/2''	3/8''	#4	#8
CA Size:3/4	100.0	100.0	100.0	87.6	16.8	2.9	1.1	1.0
CA Size:1/2	100.0	100.0	100.0	100.0	88.8	25.1	2.1	1.4
CA Size:3/8	100.0	100.0	100.0	100.0	100.0	96.0	24.5	9.4
CA Size:								

## **Unit Weight and Void in Aggregate**

#### **AASHTO T-19**

Compacted

Nominal Aggregate Size:	1 1/2"	1''	3/4''	1/2"	3/8''
Unit Weight: (lbs./cu. ft.)			94.41	91.44	98.91

Loose

Nominal Aggregate Size:	1 1/2"	1''	3/4''	1/2''	3/8''
Unit Weight: (lbs./cu. ft.)					

# Resistance to Abrasion of CA by use of the LA Machine AASHTO T-96

	LA Type	LA Result
Run # 1	В	36.32

# Specific Gravity and Absorption of Coarse Aggregate AASHTO T-85

Nominal Aggregate Size:	# 4	3/8''	1/2"	3/4''	1"	1 1/2"
Bulk Specific Gravity:		2.634	2.605	2.613		
Specific Gravity (SSD):		2.653	2.629	2.632		
<b>Apparent Specific Gravity:</b>		2.685	2.669	2.664		
Absorption:		0.722	0.916	0.729		

# Soundness of Aggregate by Use of Sodium Sulfate

#### **AASHTO T-104**

Sieve Size:	2" - 1 1/2"	1 1/2" - 1"	1" - 3/4"	3/4" - 1/2"	1/2" - 3/8"	3/8'' - # 4	#4-#8
% Loss:				0.07	0.12		

# Amount of Material Finer than # 200 Sieve in Aggregate AASHTO T-11

Aggregate Bin Size	1 1/2"	1''	3/4''	1/2''	3/8''	# 4
% Passing # 200 sieve						

Vendor:	PJ KEATING	Lab No:	20160021
Source:	SOUTH MAIN ST. QUARRY	Location:	ACUSHNET, MA

Sieve Analysis of	<b>Coarse Aggregate</b>
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**AASHTO T-27** 

% Passing

	2"	1 1/2"	1"	3/4''	1/2''	3/8''	#4	#8
CA Size:3/4	100.0	100.0	100.0	99.4	20.7	2.2	1.0	1.0
CA Size:1/2	100.0	100.0	100.0	100.0	82.9	22.6	3.4	1.7
CA Size:3/8	100.0	100.0	100.0	100.0	99.9	93.3	26.8	3.9
CA Size:								

# Unit Weight and Void in Aggregate

**AASHTO T-19** 

Compacted

Nominal Aggregate Size:	1 1/2"	1''	3/4''	1/2"	3/8''
Unit Weight: (lbs./cu. ft.)			98.87	97.38	98.91

Loose

Nominal Aggregate Size:	1 1/2"	1''	3/4''	1/2''	3/8''
Unit Weight: (lbs./cu. ft.)					

# Resistance to Abrasion of CA by use of the LA Machine AASHTO T-96

LA Result LA Type 21.31

# Specific Gravity and Absorption of Coarse Aggregate AASHTO T-85

Nominal Aggregate Size:	# 4	3/8''	1/2"	3/4"	1"	1 1/2"
Bulk Specific Gravity:		2.727	2.712	2.730		
Specific Gravity (SSD):		2.748	2.724	2.740		
Apparent Specific Gravity:		2.784	2.746	2.758		
Absorption:		0.753	0.455	0.365		

# **Soundness of Aggregate by Use of Sodium Sulfate**

Run # 1

#### **AASHTO T-104**

Sieve Size:	2" - 1 1/2"	1 1/2" - 1"	1" - 3/4"	3/4" - 1/2"	1/2" - 3/8"	3/8'' - # 4	#4-#8
% Loss:				0.09	0.21		

# Amount of Material Finer than # 200 Sieve in Aggregate AASHTO T-11

Aggregate Bin Size	1 1/2"	1''	3/4''	1/2"	3/8"	# 4
% Passing # 200 sieve						

Vendor:	BROX IND DRACUT	Lab No:	20160024
Source:	DRACUT QUARRY	Location:	DRACUT, MA

#### **AASHTO T-27**

% Passing

	2''	1 1/2"	1"	3/4''	1/2''	3/8''	#4	#8
CA Size:3/4	100.0	100.0	100.0	90.5	13.8	2.3	0.9	0.8
CA Size:1/2	100.0	100.0	100.0	100.0	93.1	36.6	6.7	3.7
CA Size:3/8	100.0	100.0	100.0	100.0	100.0	89.1	24.2	2.7
CA Size:								

## **Unit Weight and Void in Aggregate**

#### **AASHTO T-19**

Compacted

Nominal Aggregate Size:	1 1/2"	1''	3/4''	1/2''	3/8''
Unit Weight: (lbs./cu. ft.)			101.84	103.33	103.85

Loose

Nominal Aggregate Size:	1 1/2"	1''	3/4''	1/2''	3/8''
Unit Weight: (lbs./cu. ft.)					

# Resistance to Abrasion of CA by use of the LA Machine AASHTO T-96

	LA Type	LA Result
Run # 1	В	14.12

# Specific Gravity and Absorption of Coarse Aggregate AASHTO T-85

Nominal Aggregate Size:	# 4	3/8''	1/2"	3/4"	1"	1 1/2"
<b>Bulk Specific Gravity:</b>		2.931	2.915	2.932		
Specific Gravity (SSD):		2.947	2.926	2.942		
<b>Apparent Specific Gravity:</b>		2.978	2.949	2.959		
Absorption:		0.535	0.394	0.311		

# Soundness of Aggregate by Use of Sodium Sulfate AASHTO T-104

Sieve Size:	2" - 1 1/2"	1 1/2" - 1"	1" - 3/4"	3/4" - 1/2"	1/2" - 3/8"	3/8'' - # 4	#4-#8
% Loss:				0.30	0.21		

# Amount of Material Finer than # 200 Sieve in Aggregate AASHTO T-11

Aggregate Bin Size	1 1/2"	1''	3/4''	1/2"	3/8"	# 4
% Passing # 200 sieve						

Vendor:	CHERENZIA	Lab No:	20160029
Source:	OLD HOPKINTON RD.	Location:	WESTERLY, RI

Sieve	Analysis	of Coar	se Aggregate	
SIC V C	Allai y Sis	ou Cuai	SC Aggi cgaic	

#### **AASHTO T-27**

% Passing

	2"	1 1/2"	1"	3/4"	1/2''	3/8''	#4	#8
CA Size:3/4	100.0	100.0	100.0	99.7	43.3	7.8	1.4	1.2
CA Size:1/2	100.0	100.0	100.0	100.0	63.4	8.8	0.8	0.6
CA Size:								
CA Size:								

# **Unit Weight and Void in Aggregate**

#### **AASHTO T-19**

Compacted

Nominal Aggregate Size:	1 1/2"	1''	3/4''	1/2''	3/8''
Unit Weight: (lbs./cu. ft.)			92.93	92.93	89.04

Loose

Nominal Aggregate Size:	1 1/2"	1''	3/4''	1/2''	3/8''
Unit Weight: (lbs./cu. ft.)					

# Resistance to Abrasion of CA by use of the LA Machine AASHTO T-96

	LA Type	LA Result
Run # 1	В	27.79

# Specific Gravity and Absorption of Coarse Aggregate AASHTO T-85

Nominal Aggregate Size:	# 4	3/8''	1/2"	3/4"	1"	1 1/2"
Bulk Specific Gravity:		2.633	2.623	2.624		
Specific Gravity (SSD):		2.653	2.634	2.635		
<b>Apparent Specific Gravity:</b>		2.686	2.652	2.655		
Absorption:		0.743	0.423	0.445		

# Soundness of Aggregate by Use of Sodium Sulfate

#### **AASHTO T-104**

Sieve Size:	2" - 1 1/2"	1 1/2" - 1"	1" - 3/4"	3/4" - 1/2"	1/2" - 3/8"	3/8'' - # 4	#4-#8
% Loss:				0.15	0.42		

# Amount of Material Finer than # 200 Sieve in Aggregate AASHTO T-11

Aggregate Bin Size	1 1/2"	1''	3/4''	1/2''	3/8''	# 4
% Passing # 200 sieve						

Vendor:	SOUTH COUNTY S and G	Lab No:	20160031
Source:	CHARLESTOWN PIT	Location:	CHARLESTOWN, RI

# **AASHTO T-27**

% Passing

	2''	1 1/2"	1"	3/4''	1/2''	3/8''	#4	#8
CA Size:3/4	100.0	100.0	100.0	91.9	7.4	2.8	1.8	1.5
CA Size:1/2	100.0	100.0	100.0	100.0	70.9	9.4	1.7	1.2
CA Size:3/8	100.0	100.0	100.0	100.0	100.0	92.3	20.8	4.5
CA Size:								

## **Unit Weight and Void in Aggregate**

#### **AASHTO T-19**

Compacted

Nominal Aggregate Size:	1 1/2"	1''	3/4''	1/2''	3/8''
Unit Weight: (lbs./cu. ft.)			94.41	91.44	91.51

Loose

Nominal Aggregate Size:	1 1/2"	1''	3/4''	1/2''	3/8''
Unit Weight: (lbs./cu. ft.)					

# Resistance to Abrasion of CA by use of the LA Machine AASHTO T-96

LA Type	LA Result

Run # 1 49.21

# Specific Gravity and Absorption of Coarse Aggregate AASHTO T-85

Nominal Aggregate Size:	# 4	3/8''	1/2"	3/4"	1"	1 1/2"
Bulk Specific Gravity:		2.581	2.582	2.599		
Specific Gravity (SSD):		2.606	2.605	2.618		
<b>Apparent Specific Gravity:</b>		2.646	2.643	2.650		
Absorption:		0.951	0.891	0.739		

# **Soundness of Aggregate by Use of Sodium Sulfate**

#### **AASHTO T-104**

Sieve Size:	2" - 1 1/2"	1 1/2" - 1"	1" - 3/4"	3/4" - 1/2"	1/2" - 3/8"	3/8'' - # 4	#4-#8
% Loss:				0.06	0.06		

# Amount of Material Finer than # 200 Sieve in Aggregate AASHTO T-11

Aggregate Bin Size	1 1/2"	1''	3/4''	1/2"	3/8''	# 4
% Passing # 200 sieve						

Vendor:	ΓILCON - WA	ALLINC	GFORD		I	Lab No	: <u>20160</u>	0035		
Source: V	WALLINGFO	LINGFORD QUARRY Location: WALLINGFORD, CT								
Sieve Analys	is of Coarse A	Aggrega	ıte			AA	SHTO T-2	27		
% Passing										
	2''	1 1/2"	1"	3/4''	1/2''	3/8'		#8		
CA Size:3/4	100.0	100.0	100.0	100.0	76.9	26.6	5 3.1	2.1		
CA Size:	100.0	100.0	100.0	100.0	100.0	05.6	20.0	2.5		
CA Size:3/8	100.0	100.0	100.0	100.0	100.0	95.3	3 20.0	2.6		
CA Size:										
Unit Weight	and Void in	Aggreg	ate			AA	SHTO T-1	9		
<b>G</b> 4	Nomina	l Aggrega	ate Size:	1 1/2	2"	1"	3/4''	1/2"	3/8''	
Compact	ea Unit We	eight: (lb	s./cu. ft.)							
	Nomina	l Aggrega	ate Size:	1 1/2	2"	1"	3/4''	1/2''	3/8''	
Loose			s./cu. ft.)	1 1/2		_		1,2		
	<u> </u>	<u> </u>						<u> </u>		
Resistance to	Run # 1	LA T	ype	LA F	Result .50	C AA	SHTO T-9	<b>70</b>		
Specific Grav	vity and Abso	orption	of Coars	e Aggı	regate	AA	SHTO T-8	<u> </u>		
	gregate Size:	# 4		1/2"	3/4''	1"	1 1/2"			
Bulk Specifi		<i>m</i> <b>4</b>	3/0	1/2	3/4		1 1/2			
Specific Gra	<u>*</u>						+-+			
	pecific Gravity:									
Absorption:										
Soundness of	Soundness of Aggregate by Use of Sodium Sulfate  AASHTO T-104									
Sieve Size:	2" - 1 1/2"	1 1/2" -	1"   1" -	2//!!	3/4'' - 1	/2!! 1/	2'' - 3/8''	3/8'' - # 4	#4-#8	ר
% Loss:	2 - 1 1/2	11/4 -	1 1 -	3/4	3/4 - 1	14 1/	4 - 3/8	3/0 -#4	# 4 - # 0	1
/ U 11055 ·										
Amount of M	laterial Fine	r than #	200 Siev	e in A	ggrega	te AA	SHTO T-1	1		
Aggregate F	Bin Size	1 1/2"	1''	3/	4''	1/2"	3/8''	# 4		
% Passing #	200 sieve									

Vendor:	<u>P.A. L.</u>	ANDE	RS			La	ıb No:	20160	047		
Source:	<u>PLYM</u>	OUTH	QUARI	RY		Lo	ocation:	HANC	OVER, MA	A	
Sieve Anal	ysis of C	Coarse A	Aggrega	ite			AASH	TO T-27	7		
% Passii	ng										
G. G.	244	2"	1 1/2"	1"	3/4"	1/2''	3/8"	#4	#8		
CA Size:		100.0	100.0	100.0	91.3	35.2	8.1	1.9	1.3		
CA Size:		100.0	100.0	100.0	100.0	100.0	87.9	5.2	1.4		
CA Size:		100.0	100.0	100.0	100.0	100.0	07.5	3.2	1.4		
	-										
Unit Weigh	ht and V	oid in	Aggreg	ate			AASH	TO T-19	)		
Compa	acted	Nomina	l Aggrega	te Size:	1 1/2	" 1	**	3/4"	1/2''	3/8''	
Compt	ucteu	Unit We	eight: (lb	s./cu. ft.)				97.38		93.98	
Loo	)SO	Nomina	l Aggrega	te Size:	1 1/2	" 1	"	3/4"	1/2"	3/8''	
Luu	JSC	Unit We	eight: (lb	s./cu. ft.)							
Dagistanas					. I A N	I a abima					
Resistance	to Abra		CA by	use of th	e LA M LA R 25.	esult	AASH	TO T-96	5		
	to Abra	sion of Run#1	CA by  LA T	use of th	<b>LA R</b> 25.	esult 53		TO T-96			
Specific Gr	to Abra	sion of Run#1 nd Abso	CA by  LA T	use of th	<b>LA R</b> 25.	esult 53	AASH				
Specific Gr Nominal Bulk Spec	to Abra ravity ar Aggregate	Run # 1 nd Abso	CA by  LA T  B  orption	use of th	LA R 25.	esult 53 egate	AASH	TO T-85			
Specific Gr Nominal Bulk Spec Specific C	to Abra ravity ar Aggregate cific Grav Gravity (S	Run # 1 nd Absore Size: vity:	CA by  LA T  B  orption  #4	use of th	LA R 25.	esult 53 egate	AASH	TO T-85			
Specific Gr Nominal Bulk Spec Specific C Apparent	ravity ar Aggregate cific Grav Gravity (S	Run # 1 nd Absore Size: vity:	CA by  LA T  B  orption  #4	use of th	LA R 25.	esult 53 egate	AASH	TO T-85			
Specific Gr Nominal Bulk Spec Specific C	ravity ar Aggregate cific Grav Gravity (S	Run # 1 nd Absore Size: vity:	CA by  LA T  B  orption  #4	use of th	LA R 25.	esult 53 egate	AASH	TO T-85			
Specific Gr Nominal Bulk Spec Specific C Apparent Absorptio	ravity ar Aggregate cific Grav Gravity (S t Specific	Run # 1 nd Abso e Size: vity: SSD): Gravity:	LA T B orption #4	use of th	25. e Aggr	esult 53 egate 3/4"	AASH 1" 1	TO T-85	5		
Specific Gr Nominal Abulk Specific Comparent Absorption Soundness	ravity ar Aggregate cific Grav Gravity (S t Specific on: of Aggr	Run # 1 nd Abso e Size: rity: SSD): Gravity:	LA T B orption #4	use of the sype of Coars 3/8"	e Aggr	esult 53 egate 3/4"	AASH	1/2"	5	#4-#8	3
Specific Gr Nominal Bulk Specific C Apparent Absorption	ravity ar Aggregate cific Grav Gravity (S t Specific on: of Aggr	Run # 1 nd Abso e Size: rity: SSD): Gravity:	LA T B orption #4	use of the sype of Coars 3/8"	e Aggr	esult 53 egate 3/4"	AASH	TO T-10	4	# 4 - # 8	3
Specific Grant Nominal Bulk Specific Capparent Absorption Soundness Sieve Size % Loss:	ravity ar Aggregate cific Grav Gravity (S t Specific on: of Aggr	Run # 1 nd Abso e Size: vity: SSD): Gravity: regate b	LA T B orption #4  by Use of	of Coars  3/8"  f Sodium  1" 1" -	25. e Aggr 1/2"  a Sulfat	esult 53  egate 3/4"  te	AASH  AASH  2"   1/2"	TO T-10 - 3/8"	5 4 3/8'' - # 4	#4-#8	3
Bulk Spec Specific ( Apparent Absorption Soundness Sieve Size % Loss:	ravity ar Aggregate cific Grav Gravity (S t Specific on: of Aggr	Run # 1 nd Abso e Size: rity: SSD): Gravity: regate b 1 1/2"	LA T B orption #4  by Use of	of Coars  3/8"  f Sodium  1" 1" -	25. e Aggr 1/2"  a Sulfat	esult 53  egate 3/4"  te 3/4" - 1/2  ggregate	AASH  AASH  2"   1/2"	TO T-10 - 3/8"	5 4 3/8'' - # 4	# 4 - # 8	3

Vendor:	G. LOPES	Lab No:	20160049
Source:	MIDDLEBORO PIT	Location:	MIDDLEBORO, MA.

# **AASHTO T-27**

% Passing

	2''	1 1/2"	1"	3/4''	1/2''	3/8''	#4	#8
CA Size:3/4	100.0	100.0	100.0	88.4	14.0	2.3	1.2	1.0
CA Size:1/2	100.0	100.0	100.0	100.0	91.6	43.2	2.1	0.8
CA Size:3/8	100.0	100.0	100.0	100.0	92.6	57.4	4.9	1.2
CA Size:								

## **Unit Weight and Void in Aggregate**

#### **AASHTO T-19**

Compacted

Nominal Aggregate Size:	1 1/2"	1"	3/4''	1/2"	3/8''
Unit Weight: (lbs./cu. ft.)			91.44	89.96	89.04

Loose

Nominal Aggregate Size:	1 1/2"	1''	3/4''	1/2''	3/8''
Unit Weight: (lbs./cu. ft.)					

# Resistance to Abrasion of CA by use of the LA Machine AASHTO T-96

	LA Type	LA Result
Run # 1	В	31.18

# Specific Gravity and Absorption of Coarse Aggregate AASHTO T-85

Nominal Aggregate Size:	# 4	3/8''	1/2"	3/4''	1"	1 1/2"
Bulk Specific Gravity:		2.619	2.595	2.609		
Specific Gravity (SSD):		2.640	2.617	2.631		
Apparent Specific Gravity:		2.675	2.654	2.666		
Absorption:		0.810	0.856	0.815		

# Soundness of Aggregate by Use of Sodium Sulfate AASHTO T-104

Sieve Size:	2" - 1 1/2"	1 1/2" - 1"	1" - 3/4"	3/4" - 1/2"	1/2" - 3/8"	3/8'' - # 4	#4-#8
% Loss:				0.12	0.03		

# Amount of Material Finer than # 200 Sieve in Aggregate AASHTO T-11

Aggregate Bin Size	1 1/2"	1''	3/4''	1/2''	3/8''	# 4
% Passing # 200 sieve						

Vendor:	CHERENZIA-WHITE ROCK	Lab No:	20160058
Source:	WHITE ROCK QUARRY	Location:	WESTERLY, RI

# **AASHTO T-27**

% Passing

8	2"	1 1/2"	1"	3/4''	1/2''	3/8''	#4	#8
CA Size:3/4	100.0	100.0	100.0	97.1	6.4	2.5	1.3	1.0
CA Size:1/2	100.0	100.0	100.0	100.0	56.9	5.4	1.0	0.9
CA Size:3/8	100.0	100.0	100.0	100.0	100.0	93.0	21.4	3.5
CA Size:								

# **Unit Weight and Void in Aggregate**

#### **AASHTO T-19**

Compacted

Nominal Aggregate Size:	1 1/2"	1''	3/4''	1/2''	3/8''
Unit Weight: (lbs./cu. ft.)			94.41	91.44	89.04
Chit Weight. (1953/cd. 1t.)			7 11.11	71	07.0

Loose

Nominal Aggregate Size:	1 1/2"	1''	3/4''	1/2''	3/8''
Unit Weight: (lbs./cu. ft.)					

# Resistance to Abrasion of CA by use of the LA Machine AASHTO T-96

LA Type	LA Result

Run # 1 40.27

# Specific Gravity and Absorption of Coarse Aggregate AASHTO T-85

Nominal Aggregate Size:	# 4	3/8''	1/2"	3/4''	1"	1 1/2"
Bulk Specific Gravity:		2.619	2.603	2.596		
Specific Gravity (SSD):		2.638	2.621	2.614		
Apparent Specific Gravity:		2.670	2.652	2.644		
Absorption:		0.728	0.706	0.709		

# Soundness of Aggregate by Use of Sodium Sulfate

#### **AASHTO T-104**

Sieve Size:	2" - 1 1/2"	1 1/2" - 1"	1" - 3/4"	3/4" - 1/2"	1/2" - 3/8"	3/8'' - # 4	#4-#8
% Loss:				0.15	0.03		

# Amount of Material Finer than # 200 Sieve in Aggregate AASHTO T-11

Aggregate Bin Size	1 1/2"	1''	3/4''	1/2"	3/8"	# 4
% Passing # 200 sieve						

Vendor: I	OYER	Lab No: 20160061									
Source: <u>I</u>	YER QUAF	RRY				Loca	ation:	BIRD	SBORO, I	PA	
								'			
Sieve Analysi	s of Coarse	Aggrega	ite				AASH	ITO T-2	77		
% Passing	2"	1 1/2"	1"	3/4''	1/2	1/2" 3/8" #4 #			#8		
CA Size:		1 1/2	1	3/4	1/2	-	5/0	π-•	#6		
CA Size:											
CA Size:					1						
CA Size:											
			<u> </u>			-		•			
Unit Weight and Void in Aggregate AASHTO T-19											
Compacto	Nomina	l Aggrega	ite Size:	1 1/2	2''	1''		3/4''	1/2''	3/8''	
Unit		eight: (lb	s./cu. ft.)								
Loose		l Aggrega	te Size:	1 1/2	2''	1"		3/4"	1/2''	3/8''	
		eight: (lb	s./cu. ft.)								
			0.1			•					
Resistance to	Abrasion of	CA by	use of th	e LA N	Mach	ine	AASH	ITO T-9	6		
		LA T	ype	LA F	Result						
	Run # 1	В									
~ ~											
Specific Grav	ity and Abs	orption	of Coars	e Aggı	regat	e	AASH	ITO T-8	35		
Nominal Ag	gregate Size:	# 4	3/8''	1/2"	3/4''	1	" 1	1/2"			
Bulk Specifi	c Gravity:										
Specific Gra											
<u> </u>	pecific Gravity	:									
Absorption:											
Soundness of	Aggregate l	y Use o	f Sodium	Sulfa	te	_	AASH	TO T-10	04		
Sieve Size:	2" - 1 1/2"	1 1/2" - 1	1" 1" -	3/4''	3/4"	- 1/2''	1/2''	- 3/8''	3/8'' - # 4	#4-#8	
% Loss:											
Amount of Material Finer than # 200 Sieve in Aggregate AASHTO T-11											
Aggregate B	in Size	1 1/2"	1''	3/4	4''	1/2'	,	3/8''	# 4		
% Passing #			1	3/1	-						
		1					·				

Reviewed By (Print / Sign) Date ID# TL9-079 REV. 5/1/15

Vendor:	CUMBERLAND QUARRY .	Lab No:	20160068
Source:	MANVILLE HILL ROAD	Location:	CUMBERLAND, RI

#### **AASHTO T-27**

% Passing

	2''	1 1/2"	1"	3/4''	1/2''	3/8''	#4	#8
CA Size:3/4	100.0	100.0	100.0	94.1	6.4	1.4	1.0	0.9
CA Size:1/2	100.0	100.0	100.0	100.0	84.3	7.9	1.0	0.8
CA Size:3/8	100.0	100.0	100.0	100.0	100.0	95.4	14.8	2.1
CA Size:								

## **Unit Weight and Void in Aggregate**

#### **AASHTO T-19**

Compacted

Nominal Aggregate Size:	1 1/2"	1''	3/4''	1/2"	3/8''
Unit Weight: (lbs./cu. ft.)			94.41	95.90	91.51

Loose

Nominal Aggregate Size:	1 1/2"	1''	3/4''	1/2''	3/8''
Unit Weight: (lbs./cu. ft.)					

# Resistance to Abrasion of CA by use of the LA Machine AASHTO T-96

	LA Type	LA Result
Run # 1	В	29.71

# Specific Gravity and Absorption of Coarse Aggregate AASHTO T-85

Nominal Aggregate Size:	# 4	3/8''	1/2"	3/4"	1"	1 1/2"
Bulk Specific Gravity:		2.747	2.717	2.678		
Specific Gravity (SSD):		2.769	2.736	2.695		
<b>Apparent Specific Gravity:</b>		2.809	2.769	2.724		
Absorption:		0.815	0.702	0.639		

# Soundness of Aggregate by Use of Sodium Sulfate

#### **AASHTO T-104**

Sieve Size:	2" - 1 1/2"	1 1/2" - 1"	1" - 3/4"	3/4" - 1/2"	1/2" - 3/8"	3/8'' - # 4	#4-#8
% Loss:				0.01	0.09		

# Amount of Material Finer than # 200 Sieve in Aggregate AASHTO T-11

Aggregate Bin Size	1 1/2"	1''	3/4''	1/2"	3/8"	# 4
% Passing # 200 sieve						

	7							2016	20.50		
Vendor:	Continental Pa	ıvıng				Lab 1	No:	20160	)069		
Source: 1	Hanover, NH					Loca	tion:	NH			
Sieve Analys	is of Coarse A	Aggrega	ite				AASH	ITO T-2	.7		
% Passing											
Lauren	2"	1 1/2"	1''	3/4''	1/2	3"	3/8''	#4	#8		
CA Size:	100.0	100.0	100.0	100.0	0.4	2	22.0	1.7	1.0		
CA Size: 1/2 CA Size:	100.0	100.0	100.0	100.0	94.	.2 .	33.0	1.7	1.0		
CA Size:					+				+		
CA SIZE.								<u> </u>			
Unit Weight and Void in Aggregate AASHTO T-19											
Compact	Nominal	Aggrega	ate Size:	1 1/	2"	1"		3/4"	1/2"	3/8''	
Compact	Unit We	ight: (lb	s./cu. ft.)						97.38		
<del>-</del>	Nominal		ate Size:	1 1/	1 1/2"		T	3/4''	1/2"	3/8''	
Loose	00 0	s./cu. ft.)									
	D //4	LA T	-		Result						
	Run # 1	B		1:	5.90						
Specific Grav	vity and Abso	orption	of Coars	se Agg	regate	e ,	AASH	TO T-8	35		
Nominal Ag	gregate Size:	# 4	3/8''	1/2"	3/4"	1'	1	1/2''			
Bulk Specif	ic Gravity:			2.705							
Specific Gra	avity (SSD):			2.725							
Apparent Specific Gravity:				2.762							
Absorption				0.762							
			f Sodiun		ate	A	ASH	TO T-1	04		
Absorption	Aggregate b				ate 3/4"			TO T-10	04 3/8'' - # 4	#4-#8	 7
Absorption: Soundness of	Aggregate b	y Use o		n Sulfa		- 1/2"	1/2"			#4-#8	]
Absorption:  Soundness of Sieve Size: % Loss:	Aggregate b	y Use o	1" 1" -	n Sulfa	<b>3/4''</b>	<b>- 1/2''</b> 25	<b>1/2''</b>	<b>- 3/8''</b>	3/8'' - # 4	#4-#8	]
Absorption:  Soundness of Sieve Size: % Loss:  Amount of M	Aggregate b 2" - 1 1/2"  Iaterial Finer	y Use o 1 1/2'' -	1" 1" - 200 Siev	n Sulfa	3/4" 0 aggreg	- 1/2" 25 gate	1/2'' 0 AASH	- 3/8" .30	3/8" - # 4	#4-#8	]
Absorption:  Soundness of Sieve Size: % Loss:	Aggregate b  2" - 1 1/2"  Iaterial Finer  Bin Size	y Use o	1" 1" -	n Sulfa	<b>3/4''</b>	<b>- 1/2''</b> 25	1/2'' 0 AASH	<b>- 3/8''</b>	3/8'' - # 4	# 4 - # 8	]

Vendor:	BENEVENTO	OHAR	RY		T.	ab No:	20160	0070		
			1(1							
Source:	READING, N	IA.				ocation	i: <u>KEAI</u>	DING, MA	<b>\.</b>	
Sieve Analysis of Coarse Aggregate AASHTO T-27										
% Passing										
la . a	2"	1 1/2"	1"	3/4''	1/2"	3/8''	#4	#8		
CA Size:										
CA Size:										
CA Size:										
CA Size:										
Unit Weight and Void in Aggregate AASHTO T-19										
Compacted		ıl Aggrega	te Size:	1 1/2"	1	<b>''</b>	3/4"	1/2"	3/8''	
Compac	Unit W	eight: (lb	s./cu. ft.)							
	Nomina	ıl Aggrega	te Size:	1 1/2"	1 1	'''	3/4''	1/2''	3/8''	
Loose	eight: (lb						-,-			
			,							
Resistance to	o Abrasion of	CA by	use of the	e LA Ma	achine	AAS	HTO T-9	6		
		LA Ty	vpe	LA Res	sult					
	Run # 1		•							
	Kuii // I									
Specific Gra	vity and Abs	orption (	of Coarso	e Aggre	gate	AAS	SHTO T-8	35		
Nominal A	ggregate Size:	# 4	3/8"	1/2" 3	3/4''	1"	1 1/2"			
	fic Gravity:					_				
	ravity (SSD):									
Apparent S	Specific Gravity	:								
Absorption	:									
				G 10 :	•					
Soundness o	f Aggregate l	by Use of	Sodium	Sulfate		AAS	HTO T-10	04		
Sieve Size:	2" - 1 1/2"	1 1/2" - 1	1" - 3	3/4'' 3/	4'' - 1/	2" 1/2	.'' - 3/8''	3/8'' - # 4	#4-#8	
% Loss:										
Amount of N	Material Fine	r than #	200 Siev	e in Agg	regat	e AAS	БНТО Т-1	1		
Aggregate	Rin Size	1 1/2"	1"	3/4"	1	/2''	3/8''	# 4		
		1 1/2	1	3/4	+ '	.1 4	3/0	π 🕶		
% Passing # 200 sieve										

Reviewed By (Print / Sign) Date ID# TL9-079 REV. 5/1/15

Vendor:	PP()	VI VN	S & G			I o	ıb No:	20160	078		
								20160078			
Source:	WARE	EGAN F	RD PIT			Lo	cation:	BROC	OKLYN C	ONN	
Sieve Anal	ysis of C	Coarse A	Aggrega	ite			AASH	TO T-27	7		
% Passii	ng _	•••					<b>*</b> 1011	T ".	1 40		
CA S!		2"	1 1/2"	1"	3/4''	1/2''	3/8''	#4	#8		
CA Size:		100.0	100.0	100.0	100.0	83.9	20.4	3.2	1.8		
CA Size:3		100.0	100.0	100.0	100.0	100.0	98.0	27.7	4.4		
CA Size:		100.0	100.0	100.0	100.0	100.0	70.0	27.7			
								!			
Unit Weigl	ht and V	oid in	Aggreg	ate			AASH	TO T-19	)		
Compacted		Nominal Aggregate Size:			1 1/2	" 1	''	3/4"	1/2"	3/8''	7
Compa	acieu	Unit Weight: (lbs./cu. ft.)							97.38	98.91	]
_	-	Nominal Aggregate Size:			1 1/2	" 1	"	3/4"	1/2"	3/8''	Ī
		Unit Weight: (lbs./cu. ft.)									
Loo	ice i										1
	ose	Unit We	eight: (lb	os./cu. ft.)	e LA M	<b>Tachine</b>	AASH	ITO T-96	6		
	to Abra	Unit We	eight: (lb	use of th	e LA N  LA R  31.	esult	AASH	TTO T-96	6		]
Resistance	to Abra	Unit We	cight: (lb	use of th	<b>LA R</b> 31.	esult 40					]
Resistance Specific Gr	to Abra	Unit We asion of Run#1 ad Abso	CA by  LA T  B  Dorption	use of th	31. e Aggr	esult 40 egate	AASH	ITO T-85			]
Resistance Specific Gr	to Abraravity ar	Unit We asion of Run # 1 ad Abso	cight: (lb	use of th	<b>LA R</b> 31.	esult 40	AASH				]
Resistance Specific Gr Nominal Bulk Spec	to Abra ravity ar Aggregate	Unit We asion of Run # 1 and Abso e Size:	CA by  LA T  B  Dorption	use of th	31. e Aggr	esult 40 egate	AASH	ITO T-85			
Resistance Specific Gr Nominal Bulk Specific C	to Abraravity ar	Unit We asion of Run # 1 and Abso e Size: vity:	CA by  LA T  B  Orption  # 4	use of th	31. e Aggr	esult 40 egate	AASH	ITO T-85			]
Resistance Specific Gr Nominal Bulk Specific C	ravity ar Aggregate cific Grav Gravity (S	Unit We asion of Run # 1 and Abso e Size: vity:	CA by  LA T  B  Orption  # 4	use of th	31. e Aggr	esult 40 egate	AASH	ITO T-85			
Resistance Specific Gr Nominal Bulk Specific Gr Apparent Absorption	ravity ar Aggregate cific Grav Gravity (S t Specific	Unit We asion of Run # 1 ad Abso e Size: vity: GSD): Gravity:	CA by  LA T  B  Orption  # 4	use of the ype  of Coars	LA R 31. e Aggr 1/2"	esult 40 egate 3/4"	AASH	1/2"	5		]
Resistance  Specific Gr  Nominal Bulk Specific Gr  Apparent Absorption	ravity ar Aggregate cific Grav Gravity (S t Specific on: of Aggr	Unit We asion of Run # 1 and Absorber Size: Vity: SSD): Gravity:	CA by  LA T  B  Orption  # 4	use of the ype  of Coars  3/8"	e Aggr	esult 40 egate 3/4"	AASH	TO T-10	5		
Resistance  Specific Gr  Nominal Bulk Specific Conductor Apparent Absorption  Soundness  Sieve Size	ravity ar Aggregate cific Grav Gravity (S t Specific on: of Aggr	Unit We asion of Run # 1 and Absorber Size: Vity: SSD): Gravity:	CA by  LA T  B  Orption  # 4	use of the ype  of Coars  3/8"	e Aggr	esult 40 egate 3/4"	AASH	1/2"	5	#4-#	8
Resistance  Specific Gr  Nominal Bulk Specific Gr  Apparent Absorption	ravity ar Aggregate cific Grav Gravity (S t Specific on: of Aggr	Unit We asion of Run # 1 and Absorber Size: Vity: SSD): Gravity:	CA by  LA T  B  Orption  # 4	use of the ype  of Coars  3/8"	e Aggr	esult 40 egate 3/4"	AASH	TO T-10	5	#4-#	8
Resistance  Specific Gr  Nominal Bulk Specific Gr  Apparent Absorption  Soundness  Sieve Size % Loss:	ravity ar Aggregate cific Grav Gravity (S t Specific on: of Aggr	Unit We asion of Run # 1 and Absorber Size: Fixity: SSD): Gravity: regate b	CA by  LA T  B  Orption  # 4  by Use of 11/2" - 1	use of the ype  of Coars  3/8"  f Sodium  1" 1" -	1/2" Sulfat	esult 40 egate 3/4" te	AASH  AASH  1" 1  1" 1  1" 1  1" 1  1" 1  1" 1  1" 1  1" 1/2"	TO T-10	5 4 3/8'' - # 4	#4-#	8
Resistance  Specific Gr  Nominal Bulk Specific Conductor Absorption  Soundness  Sieve Size % Loss:  Amount of	ravity ar Aggregate cific Grav Gravity (S t Specific on: of Aggr	unit We asion of Run # 1 and Absorber Size: SSD): Gravity: regate b	CA by  LA T  B  Orption  # 4  by Use of 11/2" - 1	use of the ype  of Coars  3/8"  f Sodium  1" 1" -	1/2" Sulfat	esult 40  egate 3/4"  te 3/4" - 1/2  ggregate	AASH  AASH  1" 1  1" 1  1" 1  1" 1  1" 1  1" 1  1" 1  1" 1/2"	TO T-10	5 4 3/8'' - # 4	#4-#	8