

Aggregate Optimization Chart

Production Gradation Report

PLANT #: **P-103**

Sample Date: **10/17/22**

Dates Test Represents: **10/18/2022** through **10/24/2022**

Concrete Grade: **S2M, 3500HP**

Contractor: _____

MDOT No.: _____

Agg. Class	Pit #	Source	Weight (ssd)	ft ³	Specific Gravity	Contribution %
6AA	58-003	Stonoco	1650	9.83	2.69	53.2
26A	58-003	Stonoco	250	1.49	2.69	8.1
2NS	81-019	Pleasant Lake	1200	7.26	2.65	38.7
Total Wt			3100	18.58		100.0

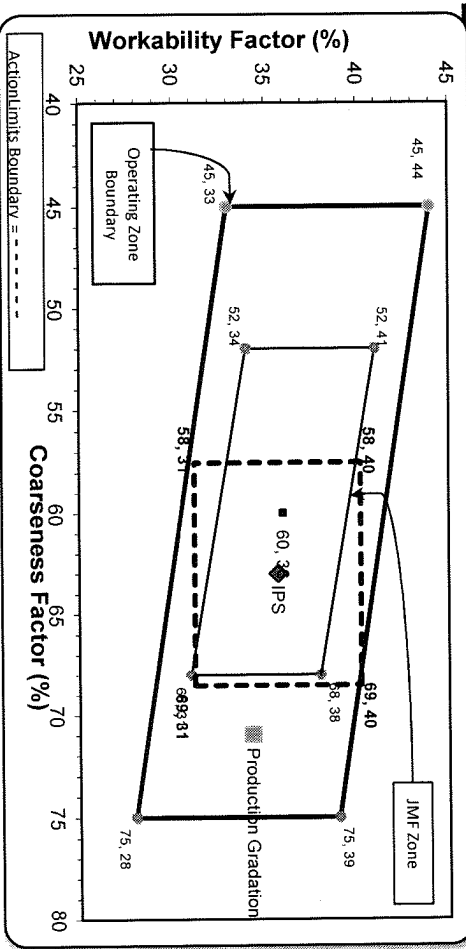
Sieve	6AA	26A	2NS	Cumulative % Passing	% Retained	Cumulative % Retained
2"	100.0	100.0	100.0	100.0	0.0	0.0
1.5"	100.0	100.0	100.0	100.0	0.0	0.0
1"	100.0	100.0	100.0	100.0	0.0	0.0
3/4"	85.4	100.0	100.0	92.2	7.8	7.8
1/2"	35.5	100.0	100.0	65.7	26.6	34.3
3/8"	13.7	91.7	100.0	53.4	12.3	46.6
#4	1.9	24.5	99.0	41.3	12.1	58.7
#8	1.2	7.7	85.4	34.3	7.0	65.7
#16	1.1	4.2	69.1	27.7	6.6	72.3
#30	1.0	3.3	51.8	20.9	6.8	79.2
#50	0.9	3.0	26.3	10.9	9.9	89.1
#100	0.9	2.8	7.7	3.7	7.2	96.3
LBW	0.7	2.7	1.7	1.2	2.4	98.8



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*Maximum % Retained must be above the 3/8" sieve.
 *Any two adjacent sieves must equal 10% except max.
 nom. max. #100 and #200 sieves.
 **Retained must be at least 4% for each sieve except max.
 nom. max. #100 and #200 sieves.
 ***Retained must be at least 8% for the 1" sieve when a 2" max size (nom. Max. 1.5") aggregate is used.

Production Gradation Batch Plant Gradations Aggregate Supplier Gradations
 Coarseness Factor: **71** Workability Factor: **34**



Sieve	Coarseness Factor:	Workability Factor:	% Retained	Cumulative % Retained
2"	63	36	0.0	0.0
1.5"			0.0	0.0
1"			0.8	0.8
3/4"			8.3	9.1
1/2"			19.6	28.7
3/8"			11.8	40.5
#4			15.7	56.2
#8			8.1	64.3
#16			8.7	73.0
#30			8.4	81.4
#50			11.8	93.2
#100			5.4	98.6
LBW			0.8	99.4

PREPARED BY:
 SM, LLC Technical Service

Approved BY: _____



Plant S103-Superior Brighton
Product 1022-2NS GR
Period: 10/16/2022 - 10/22/2022

Name/Title Doug Storey / QC Technician
Report Date 10/22/2022

Procedure	Sieve/Test	Result	Unit	2NS GR Spec
	3/8" (9.5mm)	100.0	%	100-100
	#4 (4.75mm)	99.0	%	95-100
	#8 (2.36mm)	85.4	%	65-95
	#16 (1.18mm)	69.1	%	35-75
	#30 (.6mm)	51.8	%	20-55
	#50 (.3mm)	26.3	%	10-30
	#100 (.15mm)	7.7	%	0-10
	#200 (75µm)	2.1	%	
	FM	2.61		2.6-3
	Wash Loss (#200/75µm)	1.7	%	0-3
	Total Moisture	3.65	%	



Plant S103-Superior Brighton
 Product 1067-26A Mod LS
 Period: 10/16/2022 - 10/22/2022

Name/Title Doug Storey / QC Technician
 Report Date 10/21/2022

Procedure	Sieve/Test	Result	Unit	26A Mod LS Spec
	2" (50mm)	100.0	%	
	1 1/2" (37.5mm)	100.0	%	
	1" (25mm)	100.0	%	
	3/4" (19mm)	100.0	%	100-100
	1/2" (12.5mm)	100.0	%	95-100
	3/8" (9.5mm)	91.7	%	60-95
	#4 (4.75mm)	24.5	%	5-30
	#8 (2.36mm)	7.7	%	0-12
	#16 (1.18mm)	4.2	%	
	#30 (.6mm)	3.3	%	
	#50 (.3mm)	3.0	%	
	#100 (.15mm)	2.8	%	
	#200 (75µm)	2.7	%	
	Wash Loss (#200/75um)	2.7	%	0-3
	Total Moisture	3.89	%	



Plant: S103-Superior Brighton
Product: 1051-6AA LS
Period: 10/16/2022 - 10/22/2022

Name/Title: Doug Storey / QC Technician
Report Date: 10/22/2022

Procedure	Sieve/Test	Result	Unit	6AA LS
	2" (50mm)	100.0	%	
	1 1/2" (37.5mm)	100.0	%	100-100
	1" (25mm)	100.0	%	95-100
	3/4" (19mm)	85.4	%	
	1/2" (12.5mm)	35.5	%	30-60
	3/8" (9.5mm)	13.7	%	
	#4 (4.75mm)	1.9	%	0-8
	#8 (2.36mm)	1.2	%	
	#16 (1.18mm)	1.1	%	
	#30 (.6mm)	1.0	%	
	#50 (.3mm)	0.9	%	
	#100 (.15mm)	0.9	%	
	#200 (75µm)	0.79	%	
	Wash Loss (#200/75um)	0.7	%	0-2
	Total Moisture	3.31	%	