

Aggregate Optimization Chart

Production Gradation Report

PLANT #: **P-102**

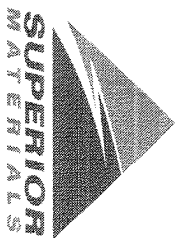
Sample Date: **6/10/24**

Dates Test Represents: **6/11/2024** through **6/17/2024**

Concrete Grade: **S2M, 3500HP**

Contractor: _____

MDOT No.: _____



Superior Materials, LLC
30701 W. 10 Mile Rd.
Suite 500
Farmington Hills, MI 48336

Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution	
GAA	58-003	Stoneco	1550	9.23	2.69	50.0	
26A	58-003	Stoneco	350	2.09	2.69	11.3	
ZNS	63-114	Highland	1200	7.26	2.65	38.7	
Total Wt						3100	100.0

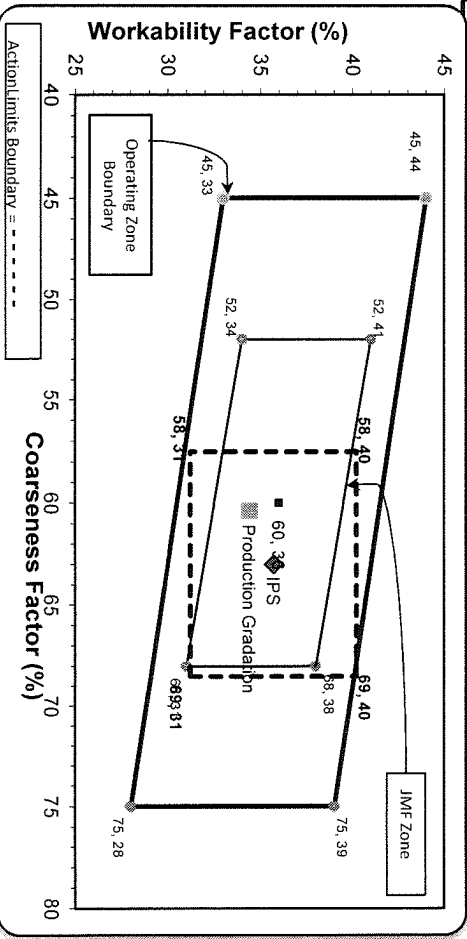
Sieve	6AA	26A	2NS	Cumulative % Passing	% Retained	Cumulative % Retained
2"	100.0	100.0	100.0	100.0	0.0	0.0
1.5"	100.0	100.0	100.0	100.0	0.0	0.0
1"	100.0	100.0	100.0	100.0	0.0	0.0
3/4"	84.5	100.0	100.0	92.3	7.8	7.8
1/2"	44.0	99.8	100.0	72.0	20.3	28.0
3/8"	23.3	89.0	100.0	60.4	11.6	39.6
#4	6.5	7.3	99.1	42.4	18.0	57.6
#8	2.6	2.5	84.8	34.4	8.0	65.6
#16	2.0	2.0	67.1	27.2	7.2	72.8
#30	1.8	1.8	47.4	19.5	7.7	80.5
#50	1.7	1.7	15.9	7.2	12.3	92.8
#100	1.6	1.6	2.9	2.1	5.1	97.9
LBW	1.4	1.5	0.0	0.9	1.2	99.1

Verify this number is 100%

*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 4% for the 3/4" sieve when
a 1.5" max. size (nom. Max. 1.0") aggregate is used.

Production Gradation Batch Plant Gradations Aggregate Supplier Gradations

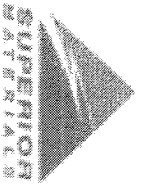
Initial Production Sample (IPS)



Sieve	Coarseness Factor:	Workability Factor:	% Retained	Cumulative % Retained
2"	60	34	0.0	0.0
1.5"	60	34	0.0	0.0
1"	60	34	0.8	0.8
3/4"	60	34	8.3	9.1
1/2"	60	34	19.6	28.7
3/8"	60	34	11.8	40.5
#4	60	34	15.7	56.2
#8	60	34	8.1	64.3
#16	60	34	8.7	73.0
#30	60	34	8.4	81.4
#50	60	34	11.8	93.2
#100	60	34	5.4	98.6
LBW	60	34	0.8	99.4

PREPARED BY:
SM, LLC Technical Service

Approved By: _____



Daily Summary Report

Date Monday, June 10, 2024

Sample Id	-1376934402	-1989637907	-674973834
Plant	S102 Superior Novi	S102 Superior Novi	S102 Superior Novi
Product	1067 26A Mod LS	1022 2NS GR	1051 6AA LS

Specification	26A Mod LS Spec	2NS GR Spec	6AA LS
Sample Type	Production	QA	QA
Time	14:08	14:10	14:15

2" (50mm)	100.0	100.0	100.0
1 1/2" (37.5mm)	100.0	100.0	100.0
1" (25mm)	100.0	100.0	100.0
3/4" (19mm)	100.0	84.5	84.5
1/2" (12.5mm)	99.8	44.0	44.0
3/8" (9.5mm)	89.0	100.0	23.3
#4 (4.75mm)	7.3	99.1	6.5
#8 (2.36mm)	2.5	84.8	2.6
#16 (1.18mm)	2.0	67.1	2.0
#30 (.6mm)	1.8	47.4	1.8
#50 (.3mm)	1.7	15.9	1.7
#100 (.15mm)	1.6	2.9	1.6
#200 (75um)	1.6	0.2	1.50
Pan	0.0	0.0	0.00
FM		2.83	
Wash Loss (#200/75um)	1.5	0.0	1.4
Total Moisture	3.06	3.24	2.68