

# Aggregate Optimization Chart

# Production Gradation Report

PLANT #: **P-02**

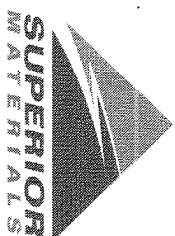
Sample Date: **5/20/24**

Dates Test Represents: **5/21/2024** through **5/27/2024**

Concrete Grade: **S2M, 3500HP**

Contractor: \_\_\_\_\_

MDOT No.: \_\_\_\_\_

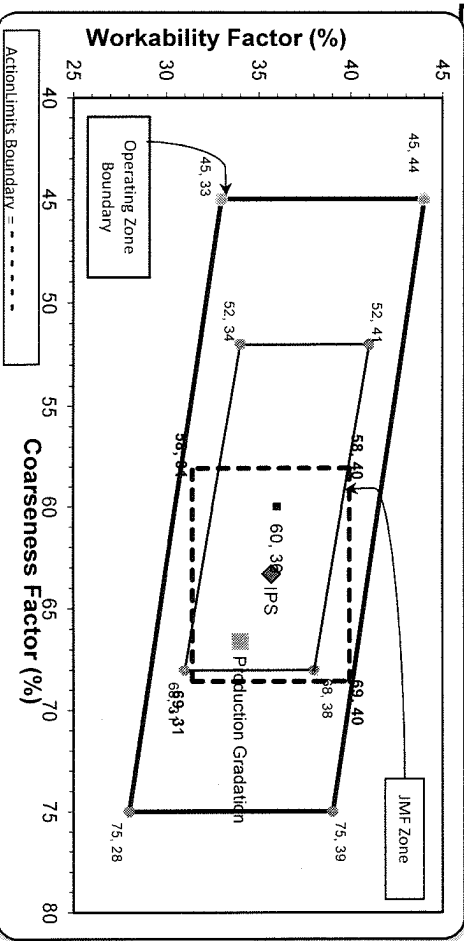


**Superior Materials, LLC**  
30701 W. 10 Mile Rd.  
Suite 500  
Farmington Hills, MI 48336

Agg. Class	Pit #	Source	Weight (SSD)	ft <sup>3</sup>	Specific Gravity	Contribution %	% Retained	Cumulative % Retained
6AA	71-47	Presque Isle	1550	9.48	2.62	50.8	0.0	0.0
26A	71-47	Presque Isle	270	1.65	2.62	8.9	0.0	0.0
2NS	63-115	Ray Rd	1230	7.44	2.65	40.3	1.6	1.6
		<b>Total Wt</b>	<b>3050</b>			<b>100.0</b>		
<b>Sieve</b>		<b>6AA</b>						
2"		100.0			100.0	100.0	0.0	0.0
1.5"		100.0			100.0	100.0	0.0	0.0
1"		96.8			100.0	98.4	1.6	1.6
3/4"		72.9			100.0	86.2	12.1	13.8
1/2"		31.2			93.5	64.5	21.8	35.5
3/8"		16.8			81.1	100.0	8.4	44.0
#4		3.6			16.1	95.1	14.4	58.4
#8		2.8			3.2	80.1	7.6	66.0
#16		2.6			1.9	64.1	6.7	72.7
#30		2.4			1.6	48.3	6.5	79.2
#50		2.3			1.5	26.2	9.0	88.1
#100		2.1			1.4	6.5	8.1	96.2
LBW		1.7			1.1	1.1	2.4	98.6

Production Gradation  Batch Plant Gradations  Aggregate Supplier Gradations

Coarseness Factor: **67** Workability Factor: **34**



Initial Production Sample (IPS)

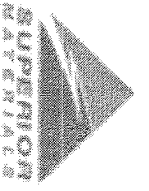
Sieve	Cumulative % Passing	% Retained	Cumulative % Retained
2"	100.0	0.0	0.0
1.5"	100.0	0.0	0.0
1"	100.0	0.0	0.0
3/4"	95.6	4.4	4.4
1/2"	73.1	22.6	26.9
3/8"	59.3	13.8	40.7
#4	42.8	16.5	57.2
#8	35.7	7.1	64.3
#16	28.9	6.8	71.1
#30	20.7	8.2	79.3
#50	9.9	10.8	90.1
#100	2.1	7.8	97.9
LBW	0.9	1.2	99.1

Coarseness Factor: **63** Workability Factor: **36**

\*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.

PREPARED BY:  
SM, LLC Technical Service

Approved By: \_\_\_\_\_



# Daily Summary Report

Date Tuesday, May 21, 2024

Sample Id -1989671045

-674984070

-1989671046

Plant Superior Hoover

Product 1022  
2NS GR

1051  
6AA LS

1067  
26A Mod LS

Specification 2NS GR Spec

6AA LS

26A Mod LS Spec

Sample Type QA  
Time 10:59

QA  
10:59

QA  
10:59

2" (50mm)	100.0	100.0	100.0
1 1/2" (37.5mm)	100.0	100.0	100.0
1" (25mm)	96.8	100.0	100.0
3/4" (19mm)	72.9	100.0	100.0
1/2" (12.5mm)	31.2	93.5	93.5
3/8" (9.5mm)	16.8	81.1	81.1
#4 (4.75mm)	3.6	16.1	16.1
#8 (2.36mm)	2.8	3.2	3.2
#16 (1.18mm)	2.6	1.9	1.9
#30 (.6mm)	2.4	1.6	1.6
#50 (.3mm)	2.3	1.5	1.5
#100 (.15mm)	2.1	1.4	1.4
#200 (75µm)	1.3	1.3	1.3
Pan	0.0	0.0	0.0
FM	2.80		
Wash Loss (#200/75µm)	1.1	1.1	1.1
Total Moisture	3.32	1.60	1.33