

# Aggregate Optimization Chart

**PLANT #:** p11

Sample Date: 12/23/24

Concrete Grade: **S2M, 3500HP**

Dates Test Represents: 12/24/2024 through 12/30/2024

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

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

Agg. Class	Pit #	Source	Weight (SSD)	ft <sup>3</sup>	Specific Gravity	% Contribution
6AA	71-47	Presque Isle	1420	8.69	2.62	46.6
26A	71-47	Presque Isle	400	2.45	2.62	13.1
2NS	63-115	Ray Rd	1230	7.44	2.65	40.3
<b>Total Wt</b>			<b>3050</b>	<b>18.57</b>		<b>100.0</b>

<----- Verify this number is 100%



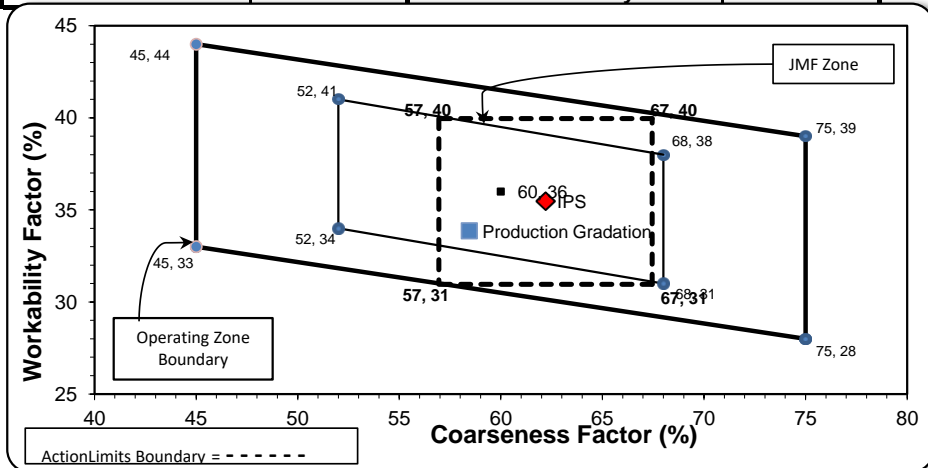
**Superior Materials, LLC**  
 30701 W. 10 Mile Rd.  
 Suite 500  
 Farmington Hills, MI 48336

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"	79.7	100.0	100.0	90.5	9.5	9.5
1/2"	39.3	94.7	100.0	71.0	19.5	29.0
3/8"	22.4	80.8	100.0	61.4	9.7	38.6
#4	2.8	17.7	97.3	42.9	18.5	57.1
#8	1.5	5.4	80.5	33.9	9.0	66.1
#16	1.4	3.2	64.8	27.2	6.7	72.8
#30	1.4	2.7	48.8	20.7	6.5	79.3
#50	1.3	2.5	24.1	10.7	10.0	89.3
#100	1.3	2.3	5.1	3.0	7.7	97.0
LBW	1.1	2.1	0.7	1.1	1.9	98.9

\*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

<b>Coarseness Factor:</b>	<b>58</b>	<b>Workability Factor:</b>	<b>34</b>
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Initial Production Sample (IPS)

<b>Coarseness Factor:</b>	<b>62</b>		
<b>Workability Factor:</b>	<b>35</b>		
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"	94.0	6.0	6.0
1/2"	70.2	23.7	29.8
3/8"	59.9	10.4	40.1
#4	42.7	17.2	57.3
#8	35.5	7.2	64.5
#16	28.4	7.0	71.6
#30	19.2	9.2	80.8
#50	8.9	10.3	91.1
#100	3.1	5.9	96.9
LBW	1.4	1.7	98.6

PREPARED BY:  
 SM, LLC Technical Service

Approved By:

## Daily Summary Report

Date Thursday, December 26, 2024

Sample Id	-674987086	-1989636438	-674982535
Plant	S000 Superior Onsite	S000 Superior Onsite	S000 Superior Onsite
Product	1051 6AA LS	1067 26A Mod LS	1022 2NS GR
Specification		26A Mod LS Spec	2NS GR Spec
Sample Type	QA	QA	QA
Time	16:25	16:26	16:27
2" (50mm)	100.0	100.0	
1 1/2" (37.5mm)	100.0	100.0	
1" (25mm)	100.0	100.0	
3/4" (19mm)	79.7	100.0	
1/2" (12.5mm)	39.3	94.7	
3/8" (9.5mm)	22.4	80.8	100.0
#4 (4.75mm)	2.8	17.7	97.3
#8 (2.36mm)	1.5	5.4	80.5
#16 (1.18mm)	1.4	3.2	64.8
#30 (.6mm)	1.4	2.7	48.8
#50 (.3mm)	1.3	2.5	24.1
#100 (.15mm)	1.3	2.3	5.1
#200 (75µm)	1.19	2.2	1.1
Pan	0.00	0.0	0.0
FM			2.79
-#200 (75um)			1.1
Wash Loss (#200/75um)	1.1	2.1	0.7
Total Moisture	3.1	3.7	4.1