

# Aggregate Optimization Chart

**PLANT #:** P-32

Sample Date: 12/14/20

Dates Test Represents: 12/15/2020 through 12/21/2020

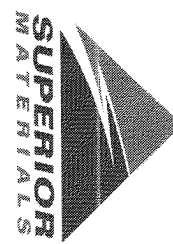
Concrete Grade: S2M

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

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

Agg. Class	Pit #	Source	Weight (ssd)	ft <sup>3</sup>	Specific Gravity	Contribution %
6AA	71-47	Presque Isle	1620	9.91	2.62	53.1
26A	71-47	Presque Isle	200	1.22	2.62	6.6
2NS	95-013	Smelter Bay	1230	7.44	2.65	40.3
<b>Total Wt</b>			<b>3050</b>	<b>18.57</b>		<b>100.0</b>

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"	46.3	98.4	100.0	71.4	20.9	28.6
3/8"	25.4	90.4	100.0	59.7	11.6	40.3
#4	3.7	19.5	95.8	41.9	17.9	58.1
#8	2.2	5.1	82.5	34.8	7.1	65.2
#16	2.0	3.2	66.2	28.0	6.8	72.0
#30	1.9	2.9	45.8	19.7	8.3	80.3
#50	1.8	2.8	27.6	12.3	7.4	87.7
#100	1.7	2.6	8.4	4.5	7.8	95.5
LBW	1.2	1.8	1.1	1.2	3.3	98.8

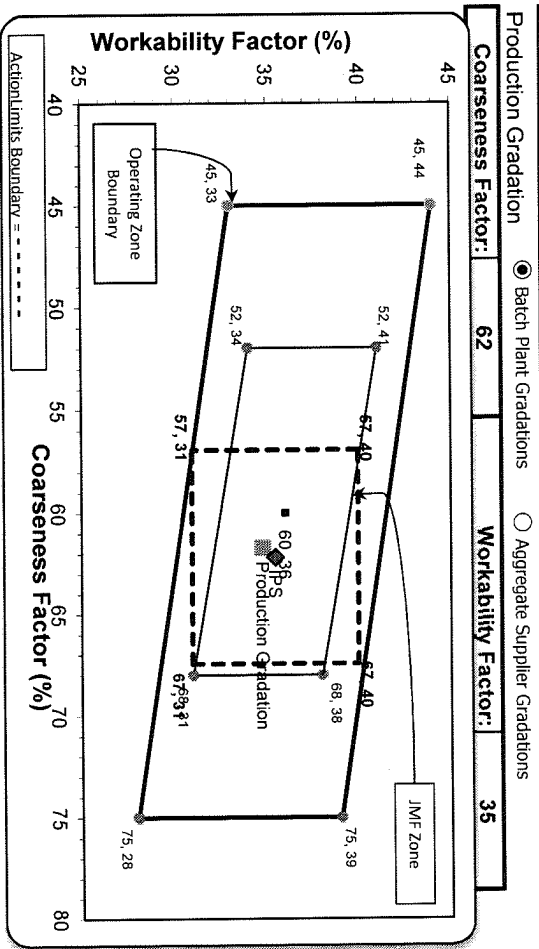


**Superior Materials, LLC**  
 30701 W. 10 Mile Rd.  
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 Farmington Hills, MI 48336

Production Gradation	Batch Plant Gradations	Aggregate Supplier Gradations
Coarseness Factor: 62	Workability Factor: 35	

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"	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



\*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.

PREPARED BY:  
 SM, LLC Technical Service

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

Edw. C. Levy Co.

Plant 958-JMT

Product 1054-6AA LS PI

Period: 12/13/2020 - 12/19/2020

Name/Title Doug Storey / QC Technician

Report Date 12/18/2020

Procedure	Sieve/Test	Result	Unit	6AA LS PI Spec
	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)	46.3	%	30-60
	3/8" (9.5mm)	25.4	%	
	#4 (4.75mm)	3.7	%	0-8
	#8 (2.36mm)	2.2	%	
	#16 (1.18mm)	2.0	%	
	#30 (.6mm)	1.9	%	
	#50 (.3mm)	1.8	%	
	#100 (.15mm)	1.7	%	
	#200 (75µm)	1.4	%	
	Wash Loss (#200/75µm)	1.2	%	0-2
	Total Moisture	3.4	%	

Edw. C. Levy Co.

Plant 958-JMT

Product 1067-26A Mod LS

Period: 12/13/2020 - 12/19/2020

Name/Title Doug Storey / QC Technician

Report Date 12/18/2020

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)	98.4	%	95-100
	3/8" (9.5mm)	90.4	%	60-95
	#4 (4.75mm)	19.5	%	5-30
	#8 (2.36mm)	5.1	%	0-12
	#16 (1.18mm)	3.2	%	
	#30 (.6mm)	2.9	%	
	#50 (.3mm)	2.8	%	
	#100 (.15mm)	2.6	%	
	#200 (75µm)	2.2	%	
	Wash Loss (#200/75um)	1.8	%	0-3
	Total Moisture	3.6	%	

# Edw. C. Levy Co.

Plant 958-JMT

Product 1022-2NS GR - Smelter Bay

Period: 12/13/2020 - 12/19/2020

Name/Title Doug Storey / QC Technician

Report Date 12/18/2020

Procedure	Sieve/Test	Result	Unit	2NS GR Spec
	3/8" (9.5mm)	100.0	%	100-100
	#4 (4.75mm)	95.8	%	95-100
	#8 (2.36mm)	82.5	%	65-95
	#16 (1.18mm)	66.2	%	35-75
	#30 (.6mm)	45.8	%	20-55
	#50 (.3mm)	27.6	%	10-30
	#100 (.15mm)	8.4	%	0-10
	#200 (75µm)	1.4	%	
	FM	2.74		2.6-3
	Wash Loss (#200/75um)	1.1	%	0-3
	Total Moisture	5.7	%	