

Aggregate Optimization Chart

Production Gradation Report

PLANT #: **P-32**

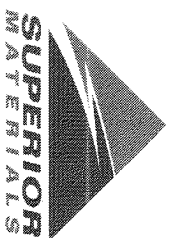
Sample Date: 11/23/20

Dates Test Represents: 11/24/2020 through 11/30/2020

Concrete Grade: **DM**

Contractor: _____

MDOT No.: _____



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

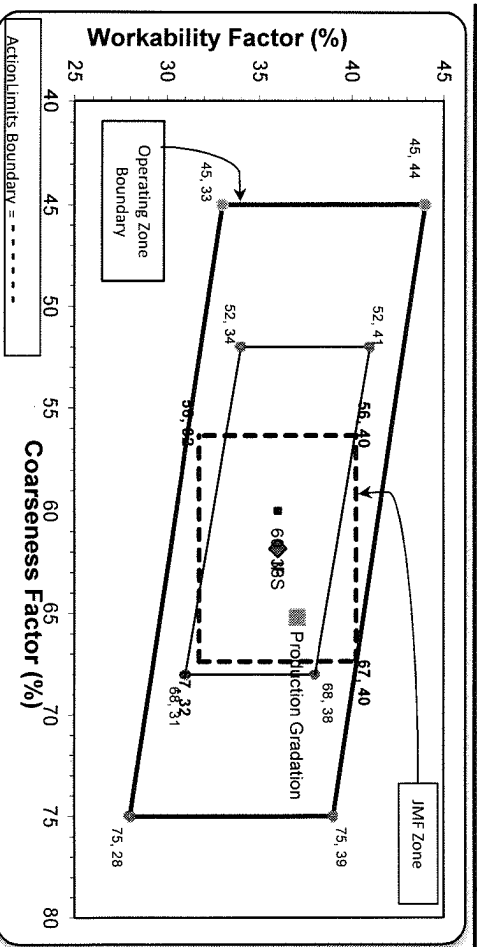
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	Contribution %	
6AA	71-47	Presque Isle	1605	9.82	2.62	55.2	
26A	71-47	Presque Isle	150	0.92	2.62	5.2	
2NS	95-013	Smelter Bay	1150	6.95	2.65	39.6	
Total Wt						2905	100.0

Sieve	% Retained	Cumulative % Retained
2"	0.0	0.0
1.5"	0.0	0.0
1"	1.4	1.4
3/4"	13.4	14.8
1/2"	18.0	32.8
3/8"	9.9	42.7
#4	16.4	59.1
#8	6.4	65.5
#16	6.4	71.9
#30	8.2	80.0
#50	8.1	88.1
#100	7.9	96.0
LBW	2.7	98.7

*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: **65** Workability Factor: **35** Adjusted WF: **37.0**



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"	95.0	5.0	5.0
1/2"	72.3	22.8	27.7
3/8"	60.4	11.8	39.6
#4	42.6	17.8	57.4
#8	36.0	6.6	64.0
#16	29.5	6.5	70.5
#30	20.3	9.2	79.7
#50	9.5	10.8	90.5
#100	3.4	6.1	96.6
LBW	1.3	2.1	98.7

PREPARED BY:
SM, LLC Technical Service

Approved By: _____

Edw. C. Levy Co.

Plant 958-JMT

Product 1054-6AA LS PI

Name/Title Doug Storey / QC Technician

Period: 11/22/2020 - 11/28/2020

Report Date 11/26/2020

Procedure	Sieve/Test	Result	Unit	6AA LS PI Spec
	2" (50mm)	100.0	%	
	1 1/2" (37.5mm)	100.0	%	100-100
	1" (25mm)	97.4	%	95-100
	3/4" (19mm)	73.2	%	
	1/2" (12.5mm)	40.6	%	30-60
	3/8" (9.5mm)	23.7	%	
	#4 (4.75mm)	3.5	%	0-8
	#8 (2.36mm)	2.2	%	
	#16 (1.18mm)	2.0	%	
	#30 (.6mm)	2.0	%	
	#50 (.3mm)	1.9	%	
	#100 (.15mm)	1.8	%	
	#200 (75µm)	1.6	%	
	Wash Loss (#200/75um)	1.3	%	0-2
	Total Moisture	3.7	%	

Edw. C. Levy Co.

Plant 958-JMT

Product 1067-26A Mod LS

Name/Title Doug Storey / QC Technician

Period: 11/22/2020 - 11/28/2020

Report Date 11/26/2020

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)	100.0	%	95-100
	3/8" (9.5mm)	89.7	%	60-95
	#4 (4.75mm)	22.0	%	5-30
	#8 (2.36mm)	6.6	%	0-12
	#16 (1.18mm)	3.6	%	
	#30 (.6mm)	2.9	%	
	#50 (.3mm)	2.9	%	
	#100 (.15mm)	2.9	%	
	#200 (75µm)	2.2	%	
	Wash Loss (#200/75um)	1.8	%	0-3
	Total Moisture	5.3	%	

Edw. C. Levy Co.

Plant 958-JMT

Product 1022-2NS GR - Smelter Bay

Name/Title Doug Storey / QC Technician

Period: 11/22/2020 - 11/28/2020

Report Date 11/26/2020

Procedure	Sieve/Test	Result	Unit	2NS GR Spec
	3/8" (9.5mm)	100.0	%	100-100
	#4 (4.75mm)	95.6	%	95-100
	#8 (2.36mm)	83.3	%	65-95
	#16 (1.18mm)	67.8	%	35-75
	#30 (.6mm)	47.3	%	20-55
	#50 (.3mm)	27.0	%	10-30
	#100 (.15mm)	7.2	%	0-10
	#200 (75µm)	1.7	%	
	FM	2.72		2.6-3
	Wash Loss (#200/75um)	1.3	%	0-3
	Total Moisture	6.0	%	