

Aggregate Optimization Chart

Production Gradation Report

PLANT #: P-36

Sample Date: 10/26/20

Dates Test Represents: 10/27/2020 through 11/2/2020

Concrete Grade: DM

Contractor:

MDOT No.:

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	200	1.22	2.62	6.9
2NS	63-92	Grange Hall	1100	6.65	2.65	37.9
Total Wt			2905	17.69		100.0

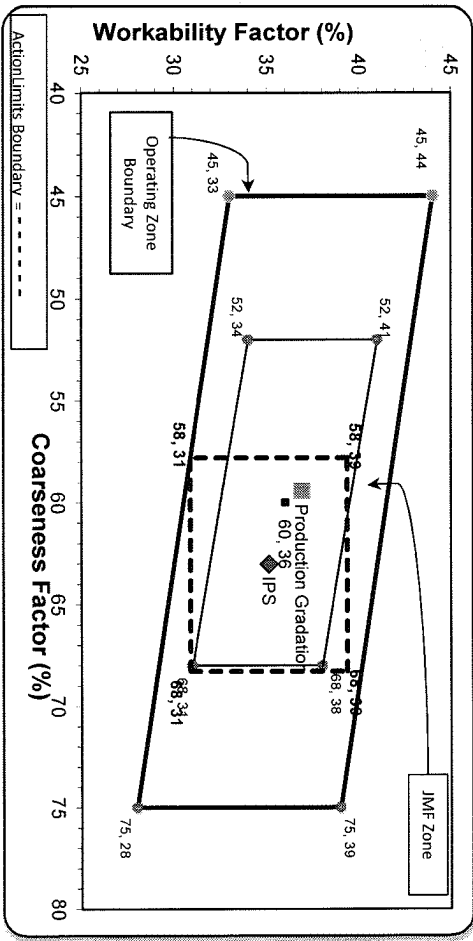
Verify this number is 100%

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"	98.1	100.0	100.0	99.0	1.0	1.0
3/4"	81.6	100.0	100.0	89.8	9.1	10.2
1/2"	49.9	97.3	100.0	72.1	17.7	27.9
3/8"	31.0	87.7	100.0	61.0	11.1	39.0
#4	5.6	18.7	97.6	41.3	19.7	58.7
#8	2.6	4.8	86.2	34.4	6.9	65.6
#16	2.2	2.4	73.0	29.0	5.4	71.0
#30	2.0	2.0	48.8	19.7	9.3	80.3
#50	1.9	1.9	17.4	7.8	12.0	92.2
#100	1.9	1.8	5.8	3.4	4.4	96.6
LBW	1.6	1.7	1.9	1.7	1.6	98.3

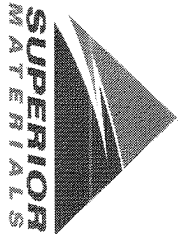
Production Gradation Batch Plant Gradations Aggregate Supplier Gradations

Coarseness Factor: 59 **Workability Factor:** 34 **Adjusted WF:** 36.9 **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"	99.1	0.9	0.9
3/4"	90.3	8.8	9.7
1/2"	69.2	21.1	30.8
3/8"	59.1	10.1	40.9
#4	41.8	17.3	58.2
#8	35.1	6.6	64.9
#16	28.5	6.6	71.5
#30	21.2	7.3	78.8
#50	8.7	12.5	91.3
#100	1.8	7.0	98.2
LBW	0.7	1.0	99.3



Superior Materials, LLC
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*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:



2470 Auburn Road
Auburn Hills, MI 48432

Plant S36-Superior Auburn Hills

Product 1051-6AA LS

Name/Title Doug Storey / QC Technician

Period: 10/25/2020 - 10/31/2020

Report Date 10/30/2020

Procedure	Sieve/Test	Result	Unit	6AA LS
	2" (50mm)	100.0	%	
	1 1/2" (37.5mm)	100.0	%	100-100
	1" (25mm)	98.1	%	95-100
	3/4" (19mm)	81.6	%	
	1/2" (12.5mm)	49.9	%	30-60
	3/8" (9.5mm)	31.0	%	
	#4 (4.75mm)	5.6	%	0-8
	#8 (2.36mm)	2.6	%	
	#16 (1.18mm)	2.2	%	
	#30 (.6mm)	2.0	%	
	#50 (.3mm)	1.9	%	
	#100 (.15mm)	1.9	%	
	#200 (75µm)	1.7	%	
	Wash Loss (#200/75um)	1.6	%	0-2
	Total Moisture	1.25	%	
AASHTO T11	-#200 (75um)	1.73	%	



2470 Auburn Road
Auburn Hills, MI 48432

Plant S36-Superior Auburn Hills

Product 1067-26A Mod LS

Name/Title Doug Storey / QC Technician

Period: 10/25/2020 - 10/31/2020

Report Date 10/30/2020

Procedure	Sieve/Test	Result	Unit	26A 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)	97.3	%	95-100
	3/8" (9.5mm)	87.7	%	60-95
	#4 (4.75mm)	18.7	%	5-30
	#8 (2.36mm)	4.8	%	0-12
	#16 (1.18mm)	2.4	%	
	#30 (.6mm)	2.0	%	
	#50 (.3mm)	1.9	%	
	#100 (.15mm)	1.8	%	
	#200 (75µm)	1.7	%	
	Wash Loss (#200/75um)	1.7	%	0-3
	Total Moisture	1.37	%	



2470 Auburn Road
Auburn Hills, MI 48432

Plant S36-Superior Auburn Hills

Product 1022-2NS GR

Name/Title Doug Storey / QC Technician

Period: 10/25/2020 - 10/31/2020

Report Date 10/30/2020

Procedure	Sieve/Test	Result	Unit	2NS GR Spec
	3/8" (9.5mm)	100.0	%	100-100
	#4 (4.75mm)	97.6	%	95-100
	#8 (2.36mm)	86.2	%	65-95
	#16 (1.18mm)	73.0	%	35-75
	#30 (.6mm)	48.8	%	20-55
	#50 (.3mm)	17.4	%	10-30
	#100 (.15mm)	5.8	%	0-10
	#200 (75µm)	2.0	%	
	FM	2.71		2.6-3
	Wash Loss (#200/75um)	1.9	%	0-3
	Total Moisture	0.84	%	