

Aggregate Optimization Chart

Production Gradation Report

PLANT #: P-36

Contractor: _____

Sample Date: 10/19/20

Concrete Grade: DM

Dates Test Represents: 10/20/2020 through 10/26/2020

MDOT No.: _____

Agg. Class	Pit #	Source	Weight (ssd)	ft ³	Specific Gravity	% Contribution
6AA	71-47	Presque Isle	1705	10.43	2.62	58.7
26A	71-47	Presque Isle	100	0.61	2.62	3.4
2NS	63-92	Grange Hall	1100	6.65	2.65	37.9
Total Wt						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"	97.4	100.0	100.0	98.5	1.5	1.5
3/4"	86.0	100.0	100.0	91.8	6.7	8.2
1/2"	47.8	98.2	100.0	69.3	22.5	30.7
3/8"	28.9	86.7	100.0	57.8	11.5	42.2
#4	6.3	19.1	97.1	41.1	16.7	58.9
#8	2.3	5.6	85.3	33.8	7.3	66.2
#16	2.1	2.8	69.3	27.6	6.3	72.4
#30	1.8	2.3	50.0	20.1	7.5	79.9
#50	1.7	2.0	23.8	10.1	10.0	89.9
#100	1.7	1.6	4.4	2.7	7.4	97.3
LBW	1.5	1.3	0.6	1.2	1.6	98.8

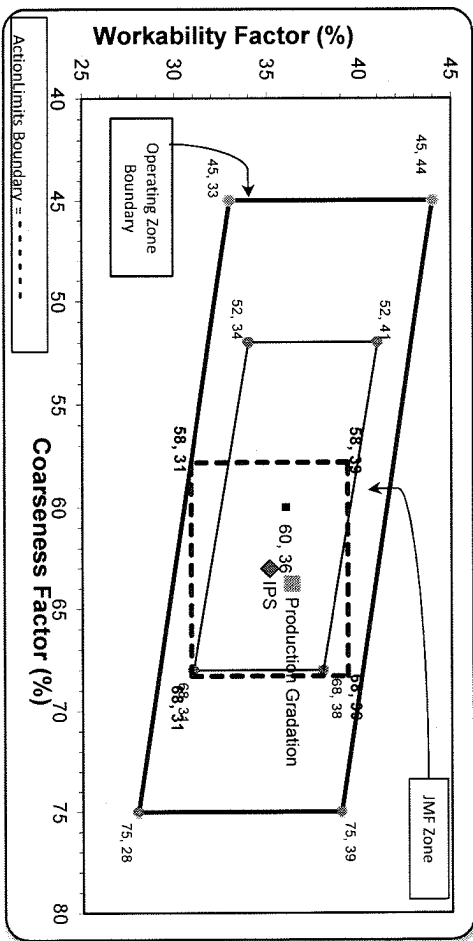
*Maximum % Retained must be above the 3/8" sieve.
 *Any two adjacent sieves must equal 10% except max.
 nom. max., #100 and #200 sieves.
 *% Retained must be at least 4% for each sieve except max.
 nom. max., #100 and #200 sieves.
 *% Retained must be at least 8% for the 1" sieve when
 a 2" max. size (nom. Max. 1.5") aggregate is used.



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

Production Gradation	<input checked="" type="radio"/> Batch Plant Gradations	<input type="radio"/> Aggregate Supplier Gradations
Coarseness Factor:	64	Workability Factor:
		Adjusted WF:
		36.3

Initial Production Sample (IPS)	Coarseness Factor:	63
	Workability Factor:	35



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

PREPARED BY:
 SM, LLC Technical Service

Approved By: _____



2470 Auburn Road
Auburn Hills, MI 48432

Plant S36-Superior Auburn Hills

Product 1051-6AA LS

Period: 10/18/2020 - 10/24/2020

Name/Title Doug Storey / QC Technician

Report Date 10/26/2020

Procedure	Sieve/Test	Result	Unit	6AA LS
	2" (50mm)	100.0	%	
	1 1/2" (37.5mm)	100.0	%	100-100
	1" (25mm)	97.4	%	95-100
	3/4" (19mm)	86.0	%	
	1/2" (12.5mm)	47.8	%	30-60
	3/8" (9.5mm)	28.9	%	
	#4 (4.75mm)	6.3	%	0-8
	#8 (2.36mm)	2.3	%	
	#16 (1.18mm)	2.1	%	
	#30 (.6mm)	1.8	%	
	#50 (.3mm)	1.7	%	
	#100 (.15mm)	1.7	%	
	#200 (75µm)	1.6	%	
	Wash Loss (#200/75um)	1.5	%	0-2
	Total Moisture	3.63	%	
AASHTO T11	-#200 (75um)	1.58	%	



2470 Auburn Road
Auburn Hills, MI 48432

Plant S36-Superior Auburn Hills
Product 1067-26A Mod LS
Period: 10/18/2020 - 10/24/2020

Name/Title Doug Storey / QC Technician
Report Date 10/26/2020

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)	98.2	%	95-100
	3/8" (9.5mm)	86.7	%	60-95
	#4 (4.75mm)	19.1	%	5-30
	#8 (2.36mm)	5.6	%	0-12
	#16 (1.18mm)	2.8	%	
	#30 (.6mm)	2.3	%	
	#50 (.3mm)	2.0	%	
	#100 (.15mm)	1.6	%	
	#200 (75µm)	1.4	%	
	Wash Loss (#200/75um)	1.3	%	0-3
	Total Moisture	4.32	%	



2470 Auburn Road
Auburn Hills, MI 48432

Plant S36-Superior Auburn Hills

Product 1022-2NS GR

Name/Title Doug Storey / QC Technician

Period: 10/18/2020 - 10/24/2020

Report Date 10/26/2020

Procedure	Sieve/Test	Result	Unit	2NS GR Spec
	3/8" (9.5mm)	100.0	%	100-100
	#4 (4.75mm)	97.1	%	95-100
	#8 (2.36mm)	85.3	%	65-95
	#16 (1.18mm)	69.3	%	35-75
	#30 (.6mm)	50.0	%	20-55
	#50 (.3mm)	23.8	%	10-30
	#100 (.15mm)	4.4	%	0-10
	#200 (75µm)	0.8	%	
	FM	2.70		2.6-3
	Wash Loss (#200/75um)	0.6	%	0-3
	Total Moisture	4.09	%	