

Aggregate Optimization Chart

Production Gradation Report

PLANT #: **P-36**

Sample Date: **6/29/20**

Dates Test Represents: **6/30/2020** through **7/6/2020**

Concrete Grade: **S2M**

Contractor: _____

MIDOT No.: _____

Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
6AA	71-47	Presque Isle	1550	9.48	2.62	50.8
26A	71-47	Presque Isle	300	1.83	2.62	9.8
2NS	63-92	Grange Hall	1200	7.26	2.65	39.3
Total Wt:			3050	18.57		100.0

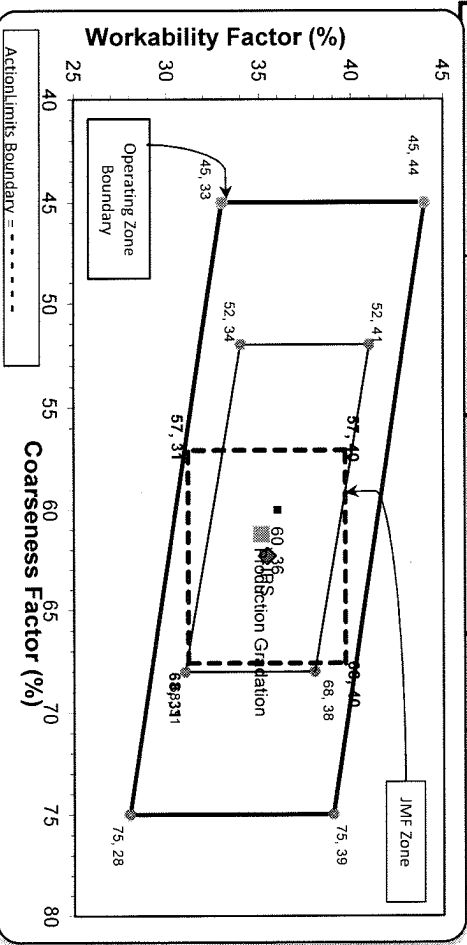
Verify this number is 100%

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"	96.7	100.0	100.0	98.3	1.7	1.7
3/4"	81.9	100.0	100.0	90.8	7.5	9.2
1/2"	43.7	98.2	100.0	71.2	19.6	28.8
3/8"	24.5	86.2	100.0	60.3	10.9	39.7
#4	4.3	26.8	96.6	42.8	17.4	57.2
#8	2.4	8.9	83.9	35.1	7.7	64.9
#16	2.1	4.6	69.0	28.7	6.4	71.3
#30	2.0	3.7	50.3	21.2	7.5	78.8
#50	1.9	3.3	22.7	10.2	10.9	89.8
#100	1.7	3.0	4.4	2.9	7.3	97.1
LBW	1.2	2.5	1.2	1.3	1.6	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: **61** Workability Factor: **35**



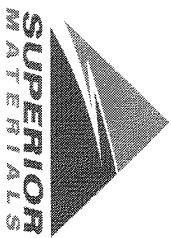
Initial Production Sample (IPS)

Coarseness Factor: **62** 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"	90.5	8.6	9.5
1/2"	69.8	20.7	30.2
3/8"	59.8	10.0	40.2
#4	42.2	17.6	57.8
#8	35.4	6.7	64.6
#16	28.8	6.7	71.2
#30	21.4	7.4	78.6
#50	8.8	12.6	91.2
#100	1.8	7.0	98.2
LBW	0.7	1.0	99.3

PREPARED BY:
SM, LLC Technical Service

Approved By: _____



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



Plant S36-Superior Auburn Hills
Product 1051-6AA LS
Period: 06/28/2020 - 07/04/2020

Name/Title Doug Storey / QC Technician
Report Date 07/03/2020

Procedure	Sieve/Test	Result	Unit	6AA LS
	2" (50mm)	100.0	%	
	1 1/2" (37.5mm)	100.0	%	100-100
	1" (25mm)	96.7	%	95-100
	3/4" (19mm)	81.9	%	
	1/2" (12.5mm)	43.7	%	30-60
	3/8" (9.5mm)	24.5	%	
	#4 (4.75mm)	4.3	%	0-8
	#8 (2.36mm)	2.4	%	
	#16 (1.18mm)	2.1	%	
	#30 (.6mm)	2.0	%	
	#50 (.3mm)	1.9	%	
	#100 (.15mm)	1.7	%	
	#200 (75µm)	1.4	%	
	Wash Loss (#200/75um)	1.2	%	0-2
	Total Moisture	3.28	%	



Plant S36-Superior Auburn Hills

Product 1067-26A Mod LS

Name/Title Doug Storey / QC Technician

Period: 06/28/2020 - 07/04/2020

Report Date 07/03/2020

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)	86.2	%	60-95
	#4 (4.75mm)	26.8	%	5-30
	#8 (2.36mm)	8.9	%	0-12
	#16 (1.18mm)	4.6	%	
	#30 (.6mm)	3.7	%	
	#50 (.3mm)	3.3	%	
	#100 (.15mm)	3.0	%	
	#200 (75µm)	2.7	%	
	Wash Loss (#200/75um)	2.5	%	0-3
	Total Moisture	3.40	%	



2470 Auburn Road
Auburn Hills, MI 48432

Plant S36-Superior Auburn Hills

Product 1022-2NS GR

Name/Title Doug Storey / QC Technician

Period: 06/28/2020 - 07/04/2020

Report Date 07/03/2020

Procedure	Sieve/Test	Result	Unit	2NS GR Spec
	3/8" (9.5mm)	100.0	%	100-100
	#4 (4.75mm)	96.6	%	95-100
	#8 (2.36mm)	83.9	%	65-95
	#16 (1.18mm)	69.0	%	35-75
	#30 (.6mm)	50.3	%	20-55
	#50 (.3mm)	22.7	%	10-30
	#100 (.15mm)	4.4	%	0-10
	#200 (75µm)	1.2	%	
	FM	2.73		2.6-3
	Wash Loss (#200/75um)	1.2	%	0-3
	Total Moisture	2.92	%	