

Aggregate Optimization Chart

Production Gradation Report

PLANT #: P11

Sample Date: 6/24/24

Dates Test Represents: 6/25/2024 through 7/1/2024

Concrete Grade: S2M, 3500HP

Contractor: _____

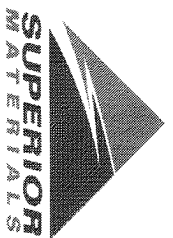
MDOT No.: _____

Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	Contribution %
6AA	71-47	Presque Isle	1520	9.30	2.62	49.8
26A	71-47	Presque Isle	300	1.83	2.62	9.8
2NS	63-115	Ray Rd	1230	7.44	2.65	40.3
Total Wt						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"	98.7	100.0	100.0	99.4	0.6	0.6
3/4"	83.8	100.0	100.0	91.9	7.4	8.1
1/2"	43.2	94.9	100.0	71.2	20.7	28.8
3/8"	22.2	83.5	100.0	59.6	11.6	40.4
#4	5.2	20.8	95.9	43.3	16.3	56.7
#8	3.3	5.1	83.8	35.9	7.4	64.1
#16	2.0	3.3	69.2	29.2	6.7	70.8
#30	1.7	2.9	50.5	21.5	7.7	78.5
#50	1.6	2.8	24.3	10.9	10.6	89.1
#100	1.5	2.7	7.4	4.0	6.9	96.0
LBW	1.3	2.6	2.0	1.7	2.3	98.3

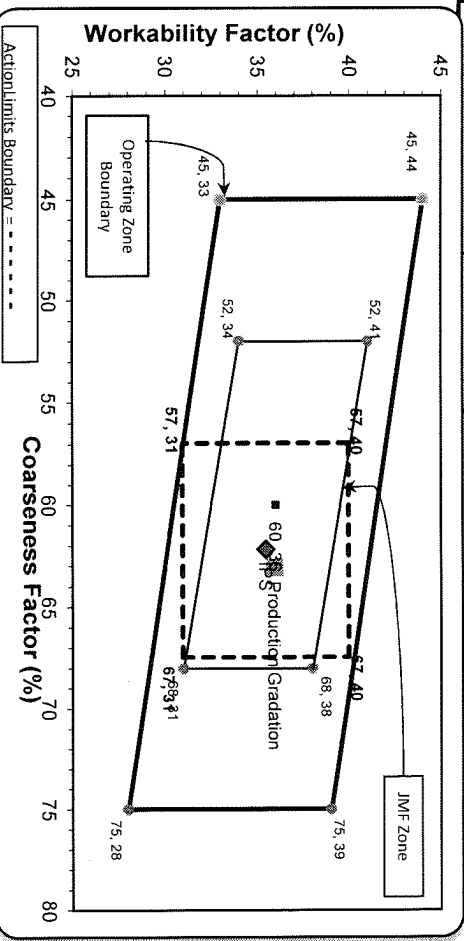
*Maximum % Retained must be above the 3/8" sieve.
 *Any two adjacent sieves must equal 10% except max.
 nom. max. #100 and #200 sieves.
 *% Retained must be at least 4% for each sieve except max.
 nom. max. #100 and #200 sieves.
 *% Retained must be at least 4% for the 3/4" sieve when
 a 1.5" max. size (nom. Max. 1.0") aggregate is used.



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

Production Gradation Batch Plant Gradations Aggregate Supplier Gradations

Coarseness Factor: **63** Workability Factor: **36**

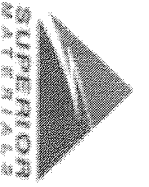


Initial Production Sample (IPS)

Sieve	Coarseness Factor:	Workability Factor:	% Retained	Cumulative % Retained
2"	62	35	0.0	0.0
1.5"			0.0	0.0
1"			0.0	0.0
3/4"			6.0	6.0
1/2"			23.7	29.8
3/8"			59.9	40.1
#4			42.7	57.3
#8			35.5	64.5
#16			28.4	71.6
#30			19.2	80.8
#50			8.9	91.1
#100			3.1	96.9
LBW			1.4	98.6

PREPARED BY: SM, LLC Technical Service

Approved By: _____



Daily Summary Report

Date Tuesday, June 25, 2024

Sample Id	Plant	Product	Specification	Sample Type	Time	2" (50mm)	1 1/2" (37.5mm)	1" (25mm)	3/4" (19mm)	1/2" (12.5mm)	3/8" (9.5mm)	#4 (4.75mm)	#8 (2.36mm)	#16 (1.18mm)	#30 (.6mm)	#50 (.3mm)	#100 (.15mm)	#200 (75µm)	Pan
-1989628059		7919 COARSE AGG P1M LS	Coarse Agg P1M LS Target	QA	07:15	100.0	100.0	43.9	9.8	1.7	1.5	1.4	1.4	1.4	1.4	1.3	1.2	1.1	0.0
-674969604		7920 INTERMED AGG P1M LS	Intermed Agg P1M LS Target	QA	07:20	100.0	100.0	100.0	100.0	79.4	49.2	6.8	2.2	1.7	1.5	1.5	1.4	1.3	0.0
-1018110836		1022 ZNS GR	ZNS GR Spec	QA	07:30	100.0	100.0	100.0	100.0	94.9	83.5	20.8	5.1	3.3	2.9	2.4	2.0	2.0	0.0
-674964846		1067 26A Mod LS	26A Mod LS Spec	QA	12:17	100.0	100.0	100.0	100.0	94.9	83.5	20.8	5.1	3.3	2.9	2.8	2.7	2.6	0.0
-674966533		1051 6AA LS	6AA LS	QA	12:21	100.0	100.0	98.7	83.8	43.2	22.2	5.2	3.3	2.0	1.7	1.6	1.5	1.32	0.00

Aggregate Optimization Chart

Production Gradation Report

PLANT #: **P-102**

Sample Date: **6/24/24**

Dates Test Represents: **6/25/2024** through **7/1/2024**

Concrete Grade: **S2M, 3500HP**

Contractor: _____

MDOT No.: _____

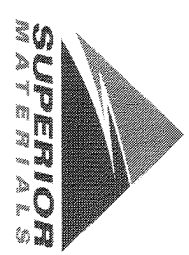
Aggr. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	Contribution %
6AA	58-003	Stoneco	1550	9.23	2.69	50.0
26A	58-003	Stoneco	350	2.09	2.69	11.3
2NS	63-114	Highland	1200	7.26	2.65	38.7
Total Wt						18.58
						100.0

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"	99.5	100.0	100.0	99.8	0.3	0.3
3/4"	86.0	100.0	100.0	93.0	6.8	7.0
1/2"	38.7	99.1	100.0	69.2	23.8	30.8
3/8"	15.4	90.3	100.0	56.6	12.6	43.4
#4	2.7	10.6	98.9	40.8	15.8	59.2
#8	1.8	3.5	86.3	34.7	6.1	65.3
#16	1.5	2.5	71.2	28.6	6.1	71.4
#30	1.3	2.1	53.2	21.5	7.1	78.5
#50	1.3	1.9	21.8	9.3	12.2	90.7
#100	1.2	1.7	3.8	2.3	7.0	97.7
LBW	1.1	1.6	1.0	1.1	1.1	98.9

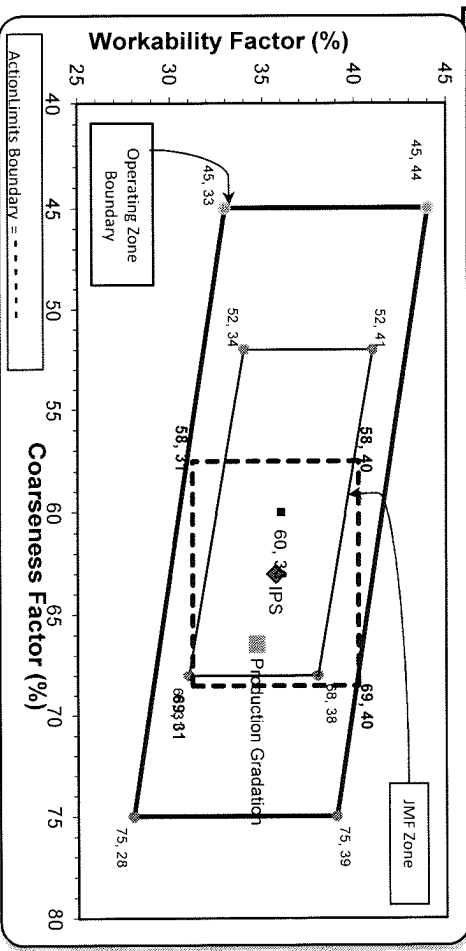
*Maximum % Retained must be above the 3/8" sieve.
 *Any two adjacent sieves must equal 10% except max.
 nom. max. #100 and #200 sieves.
 *% Retained must be at least 4% for each sieve except max.
 nom. max. #100 and #200 sieves.
 *% Retained must be at least 4% for the 3/4" sieve when
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Production Gradation Batch Plant Gradations Aggregate Supplier Gradations

Coarseness Factor: **66** Workability Factor: **35**

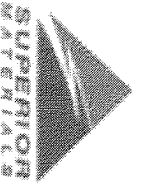


Initial Production Sample (IPS)

Sieve	% Passing	% Retained	Cumulative % Retained
2"	100.0	0.0	0.0
1.5"	100.0	0.0	0.0
1"	99.2	0.8	0.8
3/4"	90.9	8.3	9.1
1/2"	71.3	19.6	28.7
3/8"	59.5	11.8	40.5
#4	43.8	15.7	56.2
#8	35.7	8.1	64.3
#16	27.0	8.7	73.0
#30	18.6	8.4	81.4
#50	6.8	11.8	93.2
#100	1.4	5.4	98.6
LBW	0.6	0.8	99.4

PREPARED BY:
 SM, LLC Technical Service

Approved By: _____



Daily Summary Report

Date Monday, June 24, 2024

Sample Id	Plant	Product	Specification	Sample Type	Time
-1989627355	S102 Superior Novi	1051 6AA LS	6AA LS	QA	12.15
-1989631468	S102 Superior Novi	1067 26A Mod LS	26A Mod LS Spec	QA	14.49
-1376933910	S102 Superior Novi	1022 2NS GR	2NS GR Spec	QA	14.55
2" (50mm)					100.0
1 1/2" (37.5mm)					100.0
1" (25mm)					99.5
3/4" (19mm)					86.0
1/2" (12.5mm)					38.7
3/8" (9.5mm)					15.4
#4 (4.75mm)					2.7
#8 (2.36mm)					1.8
#16 (1.18mm)					1.5
#30 (.6mm)					1.3
#50 (.3mm)					1.3
#100 (.15mm)					1.2
#200 (75µm)					1.11
Pan					0.00