

Aggregate Optimization Chart

Production Gradation Report

PLANT #: **P11**

Sample Date: 9/2/26

Concrete Grade: **P1M-3500HP**

Contractor: _____

Dates Test Represents: 9/3/2026 through 9/9/2026

MDOT No.: _____

Agg. Class	Pit #	Source	Weight (SSD)	ft³	Specific Gravity	% Contribution
CA	71-47	Presque Isle	950	5.92	2.57	30.9
IA	71-47	Presque Isle	930	5.80	2.57	30.3
2NS	63-115	Ray Rd	1190	7.14	2.67	38.8
Total Wt			3070	18.87		100.0

<----- Verify this number is 100%

Sieve	CA	IA	2NS	Cumulative % Passing	% Retained	Cumulative % Retained
2"	100.0	100.0	100.0	100.0	0.0	0.0
1.5"	96.5	100.0	100.0	98.9	1.1	1.1
1"	44.3	100.0	100.0	82.8	16.2	17.2
3/4"	12.2	99.2	100.0	72.6	10.2	27.4
1/2"	3.5	82.0	100.0	64.7	7.9	35.3
3/8"	2.6	57.4	100.0	57.0	7.7	43.0
#4	2.2	12.1	96.3	41.7	15.3	58.3
#8	2.0	6.0	80.4	33.6	8.1	66.4
#16	1.9	3.4	62.6	25.9	7.7	74.1
#30	1.8	3.0	44.5	18.7	7.2	81.3
#50	1.7	2.8	21.0	9.5	9.2	90.5
#100	1.6	2.6	4.5	3.0	6.5	97.0
LBW	1.4	2.3	0.8	1.4	1.6	98.6



Superior Materials, LLC

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

*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.

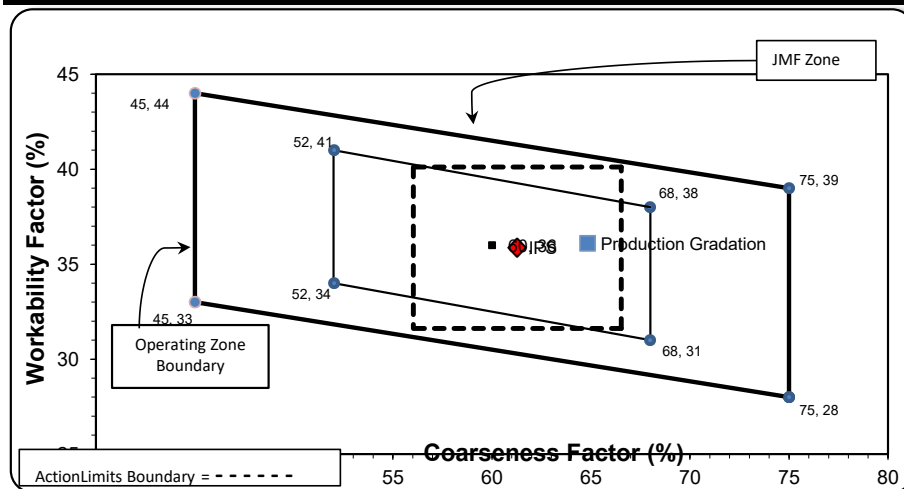
Production Gradation ☒ Batch Plant Gradations ☐ Aggregate Supplier Gradations

Adjusted WF Initial Production Sample (IPS)

Coarseness Factor:	65	Workability Factor:	34	36.1
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Coarseness Factor:	61
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Workability Factor:	36
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Sieve	Cumulative % Passing	% Retained	Cumulative % Retained
2"	100.0	0.0	0.0
1.5"	100.0	0.0	0.0
1"	99.3	0.7	0.7
3/4"	89.2	10.1	10.8
1/2"	70.7	18.5	29.3
3/8"	60.7	10.0	39.3
#4	44.4	16.3	55.6
#8	35.9	8.5	64.1
#16	27.3	8.6	72.7
#30	19.1	8.2	80.9
#50	7.4	11.7	92.6
#100	1.9	5.6	98.1
LBW	0.7	1.2	99.3

PREPARED BY:
SM, LLC Technical Service

Approved By:
Nancy Donahue



Daily Summary Report

Date Wednesday, September 2, 2026

Sample Id	-1989630846	674979060	-1989630847
Plant	Superior Hoover	Superior Hoover	Superior Hoover
Product	1022 2NS GR	1054 6AA LS PI	1067 26A Mod LS
Specification	2NS GR Spec	6AA LS	26A Mod LS Spec
Sample Type	QA	QA	QA
Time	09:20	09:20	09:20
2" (50mm)		100.0	100.0
1 1/2" (37.5mm)		100.0	100.0
1" (25mm)		97.6	100.0
3/4" (19mm)		86.2	100.0
1/2" (12.5mm)		47.4	98.8
3/8" (9.5mm)	100.0	24.0	85.9
#4 (4.75mm)	96.6	3.8	22.5
#8 (2.36mm)	81.7	2.2	6.8
#16 (1.18mm)	67.0	1.8	3.1
#30 (.6mm)	49.8	1.7	2.4
#50 (.3mm)	23.9	1.6	2.2
#100 (.15mm)	5.3	1.5	2.1
#200 (75µm)	0.9	1.44	1.9
Pan	0.0	0.00	0.0
FM	2.76		
Wash Loss (#200/75um)	0.8	1.4	1.8
Total Moisture	2.97	3.36	2.69

Aggregate Optimization Chart

Production Gradation Report

PLANT #: **P-35**

Sample Date: 9/2/26

Concrete Grade: **P1M-3500HP**

Contractor: _____

Dates Test Represents: 9/3/2026 through 9/9/2026

MDOT No.: _____

Agg. Class	Pit #	Source	Weight (SSD)	ft³	Specific Gravity	% Contribution
CA	58-003	StoneCo	1180	7.03	2.69	37.6
IA	58-003	StoneCo	765	4.56	2.69	24.4
2NS	81-019	Pleasant Lk	1195	7.23	2.65	38.1
Total Wt			3140	18.81		100.0

<----- Verify this number is 100%

Sieve	CA	IA	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"	60.6	100.0	100.0	85.2	14.8	14.8
3/4"	27.6	100.0	100.0	72.8	12.4	27.2
1/2"	14.2	82.2	100.0	63.4	9.4	36.6
3/8"	9.2	60.0	100.0	56.1	7.3	43.9
#4	4.2	10.8	97.7	41.4	14.7	58.6
#8	2.8	2.6	83.2	33.3	8.0	66.7
#16	2.3	1.8	63.1	25.3	8.0	74.7
#30	2.0	1.6	41.0	16.7	8.6	83.3
#50	1.7	1.4	15.0	6.7	10.1	93.3
#100	1.6	1.3	3.0	2.1	4.6	97.9
LBW	1.4	1.1	0.7	1.1	1.0	98.9



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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 4% for the 3/4" sieve when

a 1.5" max. size (nom. Max. 1.0") aggregate is used.

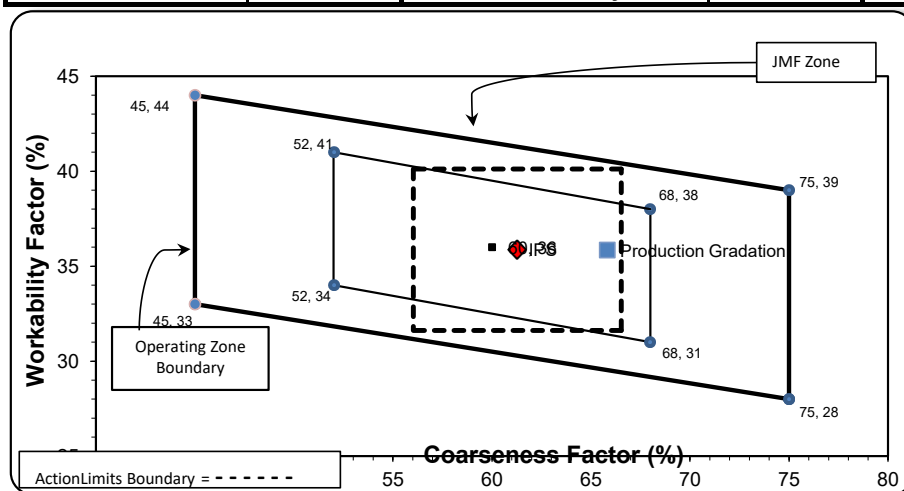
Production Gradation ☒ Batch Plant Gradations ☐ Aggregate Supplier Gradations

Adjusted WF Initial Production Sample (IPS)

Coarseness Factor:	66	Workability Factor:	33	35.8
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Coarseness Factor:	61
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Workability Factor:	36
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Sieve	Cumulative % Passing	% Retained	Cumulative % Retained
2"	100.0	0.0	0.0
1.5"	100.0	0.0	0.0
1"	99.3	0.7	0.7
3/4"	89.2	10.1	10.8
1/2"	70.7	18.5	29.3
3/8"	60.7	10.0	39.3
#4	44.4	16.3	55.6
#8	35.9	8.5	64.1
#16	27.3	8.6	72.7
#30	19.1	8.2	80.9
#50	7.4	11.7	92.6
#100	1.9	5.6	98.1
LBW	0.7	1.2	99.3

PREPARED BY:
SM, LLC Technical Service

Approved By:
Nancy Donahue



Daily Summary Report

Date Wednesday, September 02, 2026

Sample Id	-1989630980	1989630985	-1989630983	-674904611	-1989630984
Plant	S35 Superior Romulus	S35 Superior Romulus	S35 Superior Romulus	S35 Superior Romulus	S35 Superior Romulus
Product	1022 2NS GR	1051 6AA LS	1067 26A Mod LS	7919 COARSE AGG P1M LS	7920 INTERMED AGG P1M LS
Specification	2NS GR Spec	6AA LS	26A LS Spec	Coarse Agg P1M LS Target	Intermed Agg P1M LS Target
Sample Type	QA	QA	QA	QA	QA
Time	12:20	12:20	12:20	12:20	12:20
2" (50mm)		100.0	100.0	100.0	100.0
1 1/2" (37.5mm)		100.0	100.0	100.0	100.0
1" (25mm)		100.0	100.0	60.6	100.0
3/4" (19mm)		79.9	100.0	27.6	100.0
1/2" (12.5mm)		35.5	98.0	14.2	82.2
3/8" (9.5mm)	100.0	18.9	77.3	9.2	60.0
#4 (4.75mm)	97.7	2.9	12.9	4.2	10.8
#8 (2.36mm)	83.2	1.5	2.6	2.8	2.6
#16 (1.18mm)	63.1	1.2	1.6	2.3	1.8
#30 (.6mm)	41.0	1.0	1.4	2.0	1.6
#50 (.3mm)	15.0	1.0	1.3	1.7	1.4
#100 (.15mm)	3.0	0.9	1.2	1.6	1.3
#200 (75µm)	0.8	0.86	1.1	1.5	1.2
Pan	0.0	0.00	0.0	0.0	0.0
FM	2.97				
-#200 (75um)	0.82	0.86	0.86		0.86
Wash Loss (#200/75um)	0.7	0.8	1.0	1.4	1.1
Total Moisture	2.47	3.26	2.97	0.41	1.08