

Aggregate Optimization Chart

Production Gradation Report

PLANT #: **P11**

Sample Date: 10/27/25

Concrete Grade: **P1M, 3500HP, 4000HP**

Contractor: _____

Dates Test Represents: 10/28/2025 through 11/3/2025

MDOT No.: _____

Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
CA	71-47	Presque Isle	1000	6.12	2.62	32.6
IA	71-47	Presque Isle	870	5.32	2.62	28.3
2NS	63-115	Ray Rd	1200	7.26	2.65	39.1
Total Wt			3070	18.70		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"	98.0	100.0	100.0	99.3	0.7	0.7
1"	52.7	100.0	100.0	84.6	14.8	15.4
3/4"	17.9	98.0	100.0	72.7	11.9	27.3
1/2"	6.3	73.1	100.0	61.9	10.8	38.1
3/8"	4.5	48.7	100.0	54.4	7.5	45.6
#4	3.1	11.6	97.7	42.5	11.9	57.5
#8	2.6	4.7	82.3	34.3	8.1	65.7
#16	2.5	3.5	65.4	27.4	7.0	72.6
#30	2.4	3.2	46.6	19.9	7.5	80.1
#50	2.3	3.0	21.7	10.1	9.8	89.9
#100	2.2	2.9	4.8	3.4	6.7	96.6
LBW	1.9	2.5	0.8	1.6	1.8	98.4

*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

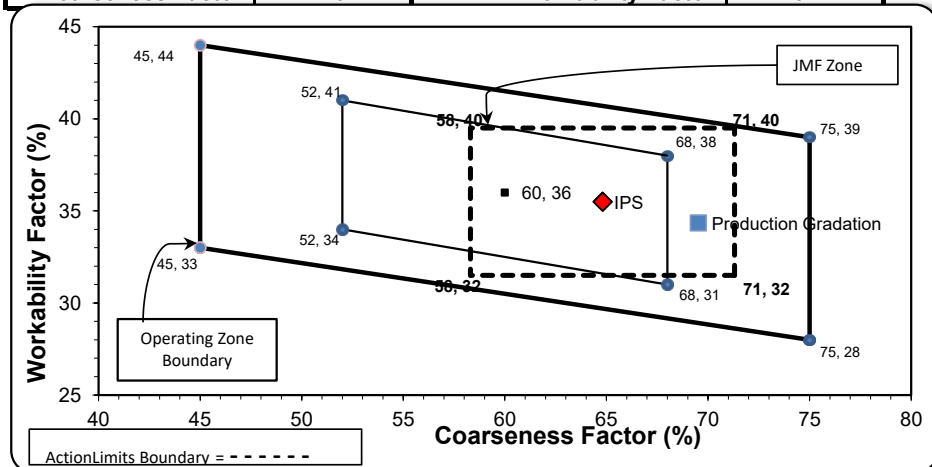
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Production Gradation ☒ Batch Plant Gradations ☐ Aggregate Supplier Gradations

Coarseness Factor: **70** **Workability Factor:** **34**



Initial Production Sample (IPS)

Coarseness Factor:		65	
Workability Factor:		36	
Sieve	Cumulative % Passing	% Retained	Cumulative % Retained
2"	100.0	0.0	0.0
1.5"	99.0	0.6	0.6
1"	84.0	15.3	16.0
3/4"	73.5	10.5	26.5
1/2"	65.2	8.2	34.8
3/8"	58.2	7.1	41.8
#4	44.1	14.1	55.9
#8	35.5	8.6	64.5
#16	29.1	6.4	70.9
#30	21.9	7.3	78.1
#50	9.6	12.2	90.4
#100	2.6	7.1	97.4
LBW	1.0	1.6	99.0

PREPARED BY:
SM, LLC Technical Service

Approved By:

Daily Summary Report

Date Monday, October 27, 2025

Sample Id	-674986366	-674934638	-28343461	-674952287	-674912515
Plant	S000 Onsite Jefferson	S000 Onsite Jefferson	S000 Onsite Jefferson	S000 Onsite Jefferson	S000 Onsite Jefferson
Product	1051 6AA LS	7919 COARSE AGG P1M LS	7920 INTERMED AGG P1M LS	1022 2NS GR	1067 26A Mod LS
Specification		Coarse Agg P1M LS Target	Intermed Agg P1M LS Target	2NS GR Spec	26A Mod LS Spec
Sample Type	QA	QA	QA	QA	QA
Time	12:52	12:52	12:53	12:54	12:54
2" (50mm)	100.0	100.0	100.0		100.0
1 1/2" (37.5mm)	100.0	98.0	100.0		100.0
1" (25mm)	95.7	52.7	100.0		100.0
3/4" (19mm)	73.9	17.9	98.0		100.0
1/2" (12.5mm)	32.9	6.3	73.1		98.1
3/8" (9.5mm)	16.0	4.5	48.7	100.0	87.0
#4 (4.75mm)	2.8	3.1	11.6	97.7	16.1
#8 (2.36mm)	2.1	2.6	4.7	82.3	4.4
#16 (1.18mm)	1.9	2.5	3.5	65.4	2.4
#30 (.6mm)	1.8	2.4	3.2	46.6	2.0
#50 (.3mm)	1.7	2.3	3.0	21.7	1.9
#100 (.15mm)	1.7	2.2	2.9	4.8	1.8
#200 (75µm)	1.53	2.0	2.6	0.9	1.7
Pan	0.00	0.0	0.0	0.0	0.0
FM				2.82	
-#200 (75um)				0.9	
Wash Loss (#200/75um)	1.4	1.9	2.5	0.8	1.7
Total Moisture	2.5	1.0	2.1	3.3	2.7