

# Aggregate Optimization Chart

## Production Gradation Report

**PLANT #:** **P11**

Sample Date: **3/24/25**

Concrete Grade: **P1M, 3500HP**

Contractor: \_\_\_\_\_

Dates Test Represents: **3/25/2025** through **3/31/2025**

MDOT No.: \_\_\_\_\_

Agg. Class	Pit #	Source	Weight (SSD)	ft <sup>3</sup>	Specific Gravity	% Contribution
CA	71-47	Presque Isle	870	5.32	2.62	28.3
IA	71-47	Presque Isle	1000	6.12	2.62	32.6
2NS	63-115	Ray Rd	1200	7.26	2.65	39.1
<b>Total Wt</b>			<b>3070</b>	<b>18.70</b>		<b>100.0</b>

<---- 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"	39.5	100.0	100.0	82.9	17.1	17.1
3/4"	6.1	99.7	100.0	73.3	9.6	26.7
1/2"	1.4	81.7	100.0	66.1	7.2	33.9
3/8"	1.4	51.3	100.0	56.2	9.9	43.8
#4	1.3	6.6	98.4	41.0	15.2	59.0
#8	1.2	2.7	81.0	32.9	8.1	67.1
#16	1.2	2.3	66.0	26.9	6.0	73.1
#30	1.2	2.2	50.1	20.6	6.2	79.4
#50	1.2	2.1	25.0	10.8	9.8	89.2
#100	1.1	2.0	4.6	2.8	8.0	97.2
LBW	0.9	1.7	1.2	1.3	1.5	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.



**Superior Materials, LLC**

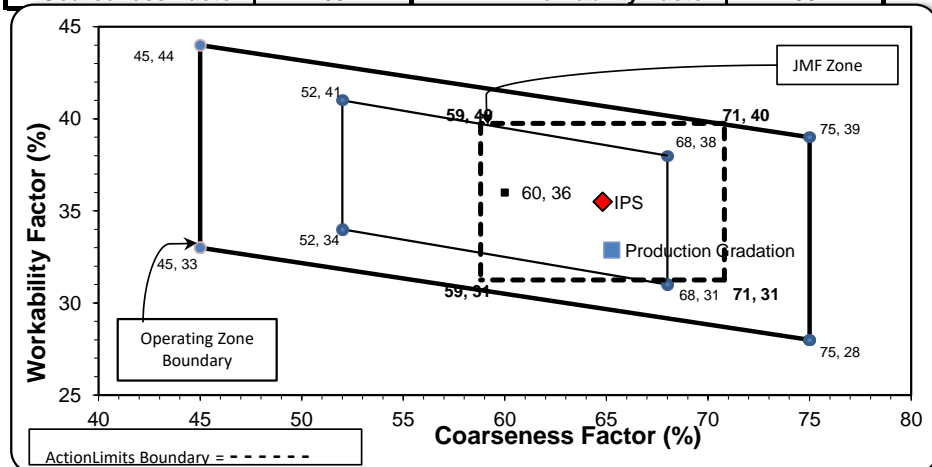
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Production Gradation ☐ Batch Plant Gradations ☒ Aggregate Supplier Gradations

<b>Coarseness Factor:</b>	<b>65</b>	<b>Workability Factor:</b>	<b>33</b>
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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: