

Aggregate Optimization Chart

Production Gradation Report

PLANT #: **p11**

Sample Date: **3/17/25**

Concrete Grade: **DM, 4500HP**

Contractor: _____

Dates Test Represents: **3/18/2025** through **3/24/2025**

MDOT No.: _____

Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
6AA	71-47	Presque Isle	1350	8.26	2.62	46.5
26A	71-47	Presque Isle	405	2.48	2.62	13.9
2NS	63-115	Ray Rd	1150	6.95	2.65	39.6
Total Wt			2905	17.69		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"	97.7	100.0	100.0	98.9	1.1	1.1
3/4"	77.5	100.0	100.0	89.5	9.4	10.5
1/2"	31.9	93.1	100.0	67.4	22.2	32.6
3/8"	15.6	79.8	100.0	58.0	9.4	42.0
#4	2.5	12.5	96.8	41.2	16.7	58.8
#8	1.7	3.4	81.1	33.4	7.9	66.6
#16	1.5	2.4	66.1	27.2	6.2	72.8
#30	1.5	2.1	49.8	20.7	6.5	79.3
#50	1.4	2.0	25.4	11.0	9.7	89.0
#100	1.3	1.9	5.0	2.8	8.1	97.2
LBW	1.1	1.6	0.8	1.1	1.8	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 a 1.5" max. size (nom. Max. 1.0") aggregate is used.



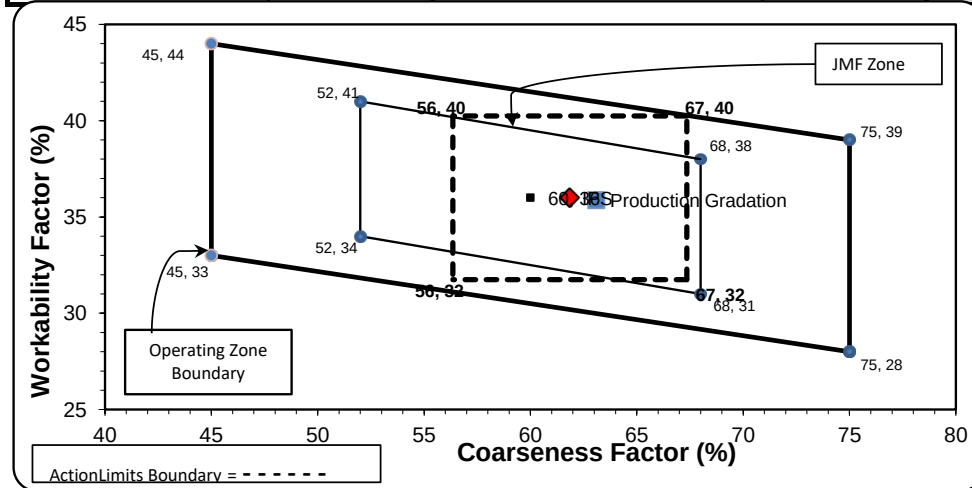
Superior Materials, LLC
 30701 W. 10 Mile Rd.
 Suite 500
 Farmington Hills, MI 48336

Production Gradation ☐ Batch Plant Gradations ☒ Aggregate Supplier Gradations

Adjusted WF Initial Production Sample (IPS)

Coarseness Factor:	63	Workability Factor:	33	35.9
---------------------------	-----------	----------------------------	-----------	-------------

Coarseness Factor:		62	
Workability Factor:		36	
Sieve	Cumulative % Passing	% Retained	Cumulative % Retained
2"	100.0	0.0	0.0
1.5"	100.0	0.0	0.0
1"	100.0	0.0	0.0
3/4"	95.0	5.0	5.0
1/2"	72.3	22.8	27.7
3/8"	60.4	11.8	39.6
#4	42.6	17.8	57.4
#8	36.0	6.6	64.0
#16	29.5	6.5	70.5
#30	20.3	9.2	79.7
#50	9.5	10.8	90.5
#100	3.4	6.1	96.6
LBW	1.3	2.1	98.7



PREPARED BY:
 SM, LLC Technical Service

Approved By:

[Signature]