

Aggregate Optimization Chart

Production Gradation Report

PLANT #: **P-102**

Sample Date: 12/11/25

Concrete Grade: **DM, 4500HP**

Contractor: _____

Dates Test Represents: 12/12/2025 through 12/12/2025

MDOT No.: _____

Agg. Class	Pit #	Source	Weight (SSD)	ft³	Specific Gravity	% Contribution
6AA	58-003	Stoneco	1400	8.34	2.69	48.6
26A	58-003	Stoneco	300	1.79	2.69	10.4
2NS	63-092	Grange Hall	1180	7.06	2.68	41.0
Total Wt			2880	17.18		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"	99.8	100.0	100.0	99.9	0.1	0.1
3/4"	86.8	100.0	100.0	93.6	6.3	6.4
1/2"	44.0	99.3	100.0	72.7	20.9	27.3
3/8"	23.1	84.1	100.0	61.0	11.7	39.0
#4	3.5	10.0	98.2	43.0	18.0	57.0
#8	1.7	2.4	84.0	35.5	7.5	64.5
#16	1.2	2.0	68.5	28.9	6.6	71.1
#30	1.1	1.7	50.2	21.3	7.6	78.7
#50	1.1	1.4	21.7	9.6	11.7	90.4
#100	1.0	1.2	3.2	1.9	7.6	98.1
LBW	1.0	1.0	0.4	0.8	1.2	99.2



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.

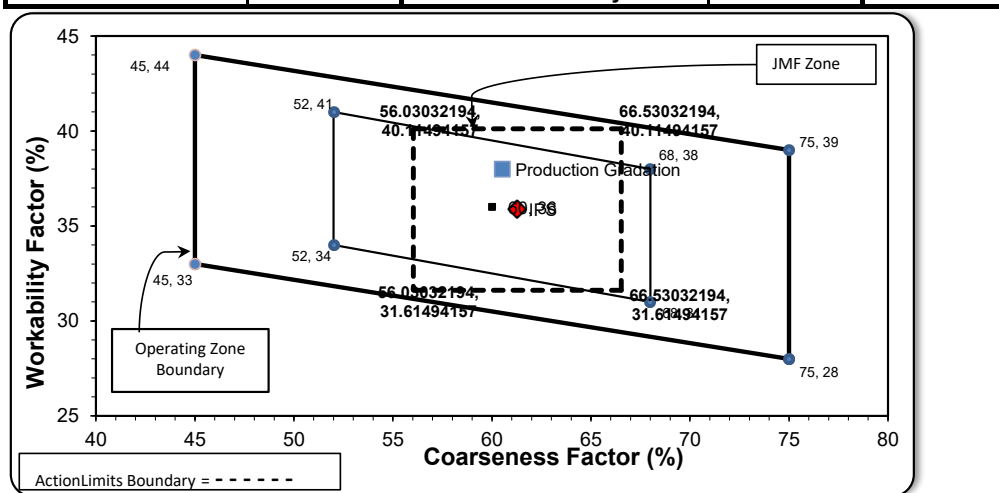
*% Retained must be at least 4% for the 3/4" sieve when

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: **61** **Workability Factor:** **35** **38.0**



Coarseness Factor:		61	
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"	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

Aggregate Optimization Chart

Production Gradation Report

PLANT #: **P-103**

Sample Date: 12/11/25

Concrete Grade: **DM, 4500HP**

Contractor: _____

Dates Test Represents: 12/12/2025 through 12/19/2025

MDOT No.: _____

Agg. Class	Pit #	Source	Weight (SSD)	ft³	Specific Gravity	% Contribution
6AA	58-003	Stoneco	1400	8.34	2.69	48.6
26A	58-003	Stoneco	300	1.79	2.69	10.4
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#30	1.1	1.7	50.2	21.3	7.6	78.7
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#100	1.0	1.2	3.2	1.9	7.6	98.1
LBW	1.0	1.0	0.4	0.8	1.2	99.2



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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.

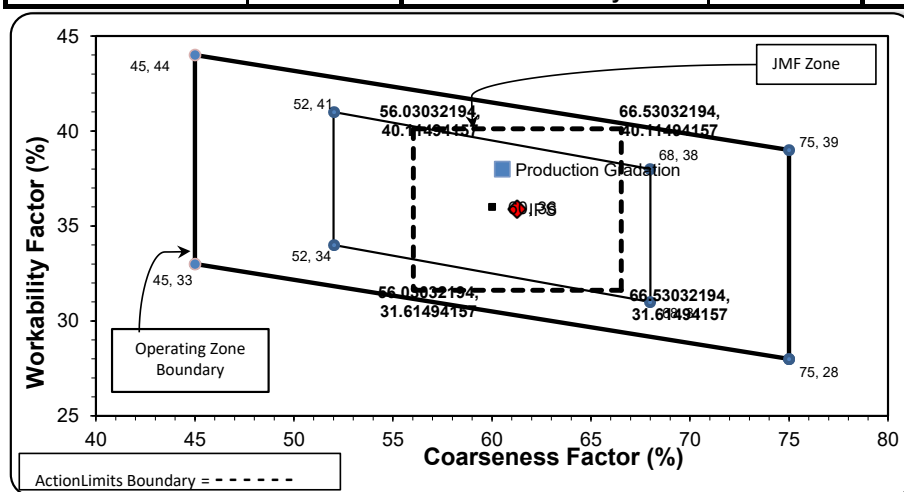
Production Gradation ☐ Batch Plant Gradations ☒ Aggregate Supplier Gradations

Adjusted WF Initial Production Sample (IPS)

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