

Aggregate Optimization Chart

PLANT #: **P-02**

Contractor: _____

Sample Date: 5/18/26

Concrete Grade: **DM 4500HP**

Dates Test Represents: 5/19/2026 through 5/25/2026 5" HANDSET

MDOT No.: _____

Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
6AA	71-47	Stone Co	1170	7.35	2.55	40.5
26A	71-47	Stone Co	560	3.52	2.55	19.4
2NS	63-115	Ray Rd	1160	6.96	2.67	40.1
Total Wt			2890	17.83		100.0

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



Superior Materials, LLC

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

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"	99.3	100.0	100.0	99.7	0.3	0.3
3/4"	88.2	100.0	100.0	95.2	4.5	4.8
1/2"	39.2	97.3	100.0	74.9	20.4	25.1
3/8"	18.6	83.5	100.0	63.8	11.0	36.2
#4	2.9	16.1	98.1	43.7	20.2	56.3
#8	1.9	5.1	87.2	36.8	6.9	63.2
#16	1.7	2.9	64.0	26.9	9.8	73.1
#30	1.6	2.3	43.6	18.6	8.3	81.4
#50	1.6	2.0	20.0	9.1	9.5	90.9
#100	1.5	1.9	3.9	2.5	6.5	97.5
LBW	1.4	1.7	0.8	1.2	1.3	98.8

*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.

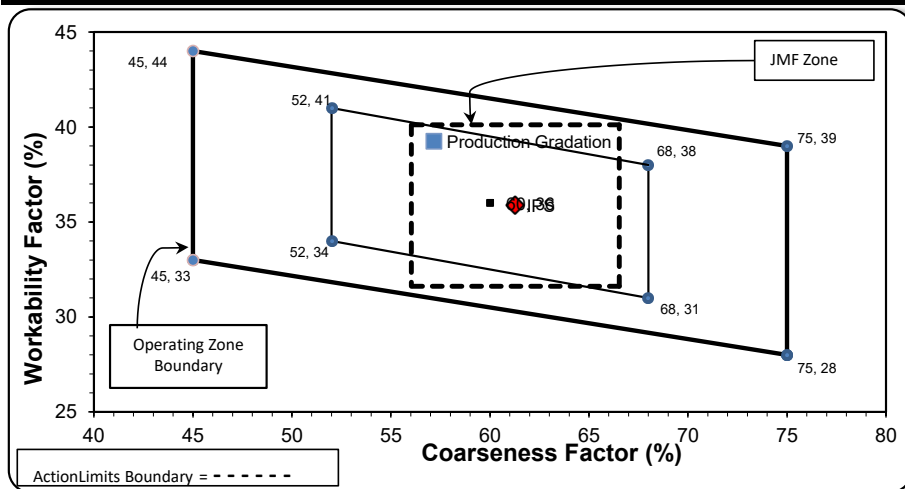
Production Gradation Batch Plant Gradations Aggregate Supplier Gradations

Adjusted WF Initial Production Sample (IPS)

Coarseness Factor:	57	Workability Factor:	37	39.3
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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

Aggregate Optimization Chart

PLANT #: **P-102**

Sample Date: 5/18/26

Concrete Grade: **DM, 4500HP**

Contractor: _____

Dates Test Represents: 5/19/2026 through 5/25/2026

HANDSET 5"

MDOT No.: _____

Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
6AA	71-47	Presque Isle	1350	8.42	2.57	45.3
26A	71-47	Presque Isle	550	3.43	2.57	18.5
2NS	63-115	Ray Rd	1080	6.48	2.67	36.2
Total Wt			2980	18.33		100.0

← Verify this number is 100%



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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"	99.3	100.0	100.0	99.7	0.3	0.3
3/4"	88.2	100.0	100.0	94.7	5.0	5.3
1/2"	39.2	97.3	100.0	72.0	22.7	28.0
3/8"	18.6	83.5	100.0	60.1	11.9	39.9
#4	2.9	16.1	98.1	39.8	20.2	60.2
#8	1.9	14.1	87.2	35.1	4.8	64.9
#16	1.7	2.9	64.0	24.5	10.6	75.5
#30	1.6	2.3	43.6	17.0	7.5	83.0
#50	1.6	2.0	20.0	8.3	8.6	91.7
#100	1.5	1.9	3.9	2.4	5.9	97.6
LBW	1.4	1.7	0.8	1.2	1.2	98.8

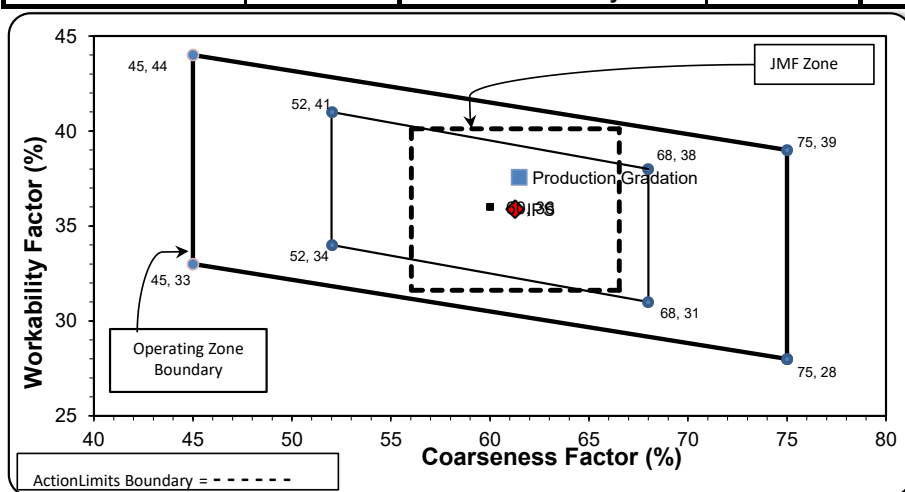
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 *Any two adjacent sieves must equal 10% except max., nom. max., #100 and #200 sieves.
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Production Gradation Batch Plant Gradations Aggregate Supplier Gradations Adjusted WF Initial Production Sample (IPS)

Coarseness Factor: 61 **Workability Factor: 35** **37.6**

Coarseness Factor: 61

Workability Factor: 36



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#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

PLANT #: **P-103**

Sample Date: 5/18/26

Concrete Grade: **DM, 4500HP**

Contractor: _____

Dates Test Represents: 5/19/2026 through 5/25/2026

HANDSET 5"

MDOT No.: _____

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6AA	71-47	Presque Isle	1350	8.42	2.57	45.3
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1/2"	39.2	97.3	100.0	72.0	22.7	28.0
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#100	1.5	1.9	3.9	2.4	5.9	97.6
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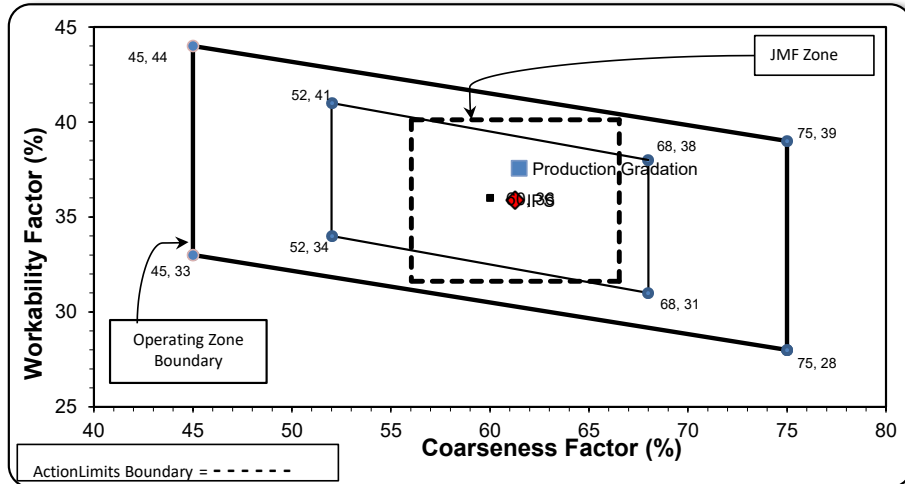
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