

# Aggregate Optimization Chart

# Production Gradation Report

**PLANT #:** P-102

Sample Date: 2/12/24

Concrete Grade: DM, 4500HP

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

Dates Test Represents: 2/13/2024 through 2/19/2024

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

Agg. Class	Pit #	Source	Weight (SSD)	ft <sup>3</sup>	Specific Gravity	% Contribution
6AA	58-003	Stoneco	1400	8.34	2.69	47.5
26A	58-003	Stoneco	400	2.38	2.69	13.6
2NS	63-114	Highland	1150	6.95	2.65	39.0
<b>Total Wt</b>			<b>2950</b>	<b>17.68</b>		<b>100.0</b>

<----- 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"	99.9	100.0	100.0	100.0	0.0	0.0
3/4"	86.2	100.0	100.0	93.5	6.5	6.5
1/2"	39.3	99.0	100.0	71.1	22.4	28.9
3/8"	16.1	87.3	100.0	58.5	12.6	41.5
#4	2.8	10.8	99.1	41.4	17.0	58.6
#8	2.1	3.3	86.1	35.0	6.4	65.0
#16	1.9	2.3	68.4	27.9	7.1	72.1
#30	1.7	2.0	49.1	20.2	7.7	79.8
#50	1.6	1.8	20.8	9.1	11.1	90.9
#100	1.6	1.8	3.5	2.4	6.7	97.6
LBW	1.4	1.6	0.8	1.2	1.2	98.8

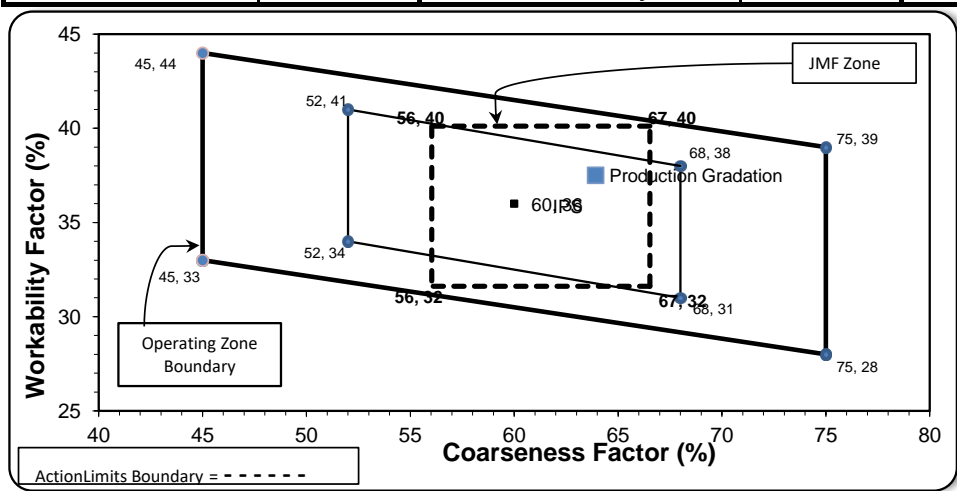
\*Maximum % Retained must be above the 3/8" sieve.  
 \*Any two adjacent sieves must equal 10% except max., nom. max., #100 and #200 sieves.  
 \*% Retained must be at least 4% for each sieve except max., nom. max., #100 and #200 sieves.  
 \*% Retained must be at least 4% for the 3/4" sieve when a 1.5" max. size (nom. Max. 1.0") aggregate is used.

Production Gradation  Batch Plant Gradations  Aggregate Supplier Gradations  Adjusted WF Initial Production Sample (IPS)

<b>Coarseness Factor:</b> 64	<b>Workability Factor:</b> 35	<b>Adjusted WF:</b> 37.5
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<b>Coarseness Factor:</b> 61
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<b>Workability Factor:</b> 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: