Aggregate Optimization Chart

Production Gradation Report

PLANT #: **P-103**

Contractor:

Sample Date: 6/9/25

Concrete Grade: **P1M, 3500HP, 4000HP**

Dates Test Represents: 6/10/2025 through 6/16/2025

MDOT No.:

Agg. Class	Pit #	Source	Weight (SSD)	ft³	Specific Gravity	% Contribution
CA	58-003	Stoneco	1450	8.64	2.69	46.5
IA	58-003	Stoneco	470	2.80	2.69	15.1
2NS	63-114	Highland	1200	7.26	2.65	38.5
		Total Wt	**3120**	**18.70**		100.0

<----- 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"	65.1	100.0	100.0	83.8	16.2	16.2
3/4"	43.3	100.0	100.0	73.6	10.1	26.4
1/2"	18.2	85.3	100.0	59.8	13.9	40.2
3/8"	12.8	67.1	100.0	54.5	5.3	45.5
#4	3.5	14.5	99.0	41.9	12.6	58.1
#8	2.1	3.3	85.6	34.4	7.5	65.6
#16	1.7	2.4	68.2	27.4	7.0	72.6
#30	1.5	1.8	49.4	20.0	7.4	80.0
#50	1.3	1.6	22.8	9.6	10.4	90.4
#100	1.2	1.4	3.5	2.1	7.5	97.9
LBW	1.0	1.4	0.5	0.9	1.2	99.1

*Maximum % Retained must be above the 3/8" sieve.

*Any two adjacent sieves must equal 10% except max., nom. max., #100 and #200 sieves.

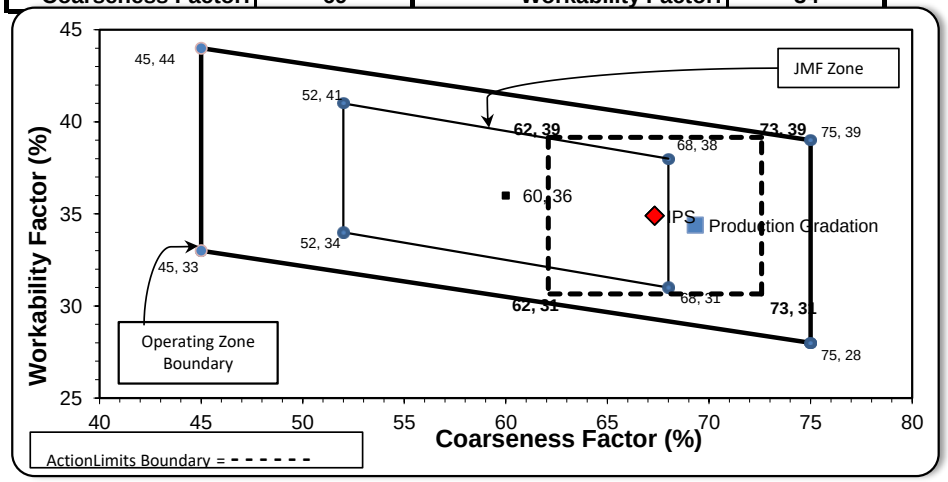
*% Retained must be at least 4% for each sieve except max., nom. max., #100 and #200 sieves.

*% Retained must be at least 8% for the 1" sieve when a 2" max. size (nom. Max. 1.5") aggregate is used.

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Production Gradation ○ Batch Plant Gradations ◉ Aggregate Supplier Gradations

Coarseness Factor:	69	Workability Factor:	34



Intial Production Sample (IPS)

Coarseness Factor:	67
Workability Factor:	35

Sieve	Cumulative % Passing	% Retained	Cumulative % Retained
2"	100.0	0.0	0.0
1.5"	100.0	0.0	0.0
1"	85.5	14.5	14.5
3/4"	73.4	12.1	26.6
1/2"	61.0	12.4	39.0
3/8"	56.2	4.8	43.8
#4	43.1	13.1	56.9
#8	34.9	8.2	65.1
#16	29.4	5.5	70.6
#30	21.6	7.8	78.4
#50	8.1	13.4	91.9
#100	2.2	5.9	97.8
LBW	1.4	0.8	98.6

PREPARED BY:
SM, LLC Technical Service

Approved BY: