

Aggregate Optimization Chart

MIX ID'S: DDD0K7E7 and DDD0K7E9

Production Gradation Report

PLANT #: **P-38**

Sample Date: 12/19/16

Concrete Grade: **DM**

Contractor: _____

Dates Test Represents: 12/19/2016 to 12/25/2016

MDOT No.: _____

Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
6AA	58-003	Stoneco	1350	8.04	2.69	45.2
26A	58-003	Stoneco	420	2.50	2.69	14.0
2NS	81-93	Burmeister	1220	7.41	2.64	40.8
Total Wt			2990	17.95		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"	100.0	100.0	100.0	100.0	0.0	0.0
3/4"	81.6	100.0	100.0	91.7	8.3	8.3
1/2"	38.8	99.7	100.0	72.3	19.4	27.7
3/8"	15.0	84.4	100.0	59.4	12.9	40.6
#4	3.6	21.0	98.8	44.9	14.5	55.1
#8	2.6	6.0	86.4	37.3	7.6	62.7
#16	1.9	2.9	71.2	30.3	7.0	69.7
#30	1.5	2.2	52.0	22.2	8.1	77.8
#50	1.4	1.9	20.4	9.2	13.0	90.8
#100	1.3	1.8	3.5	2.3	7.0	97.7
LBW	1.1	1.6	1.2	1.2	1.1	98.8

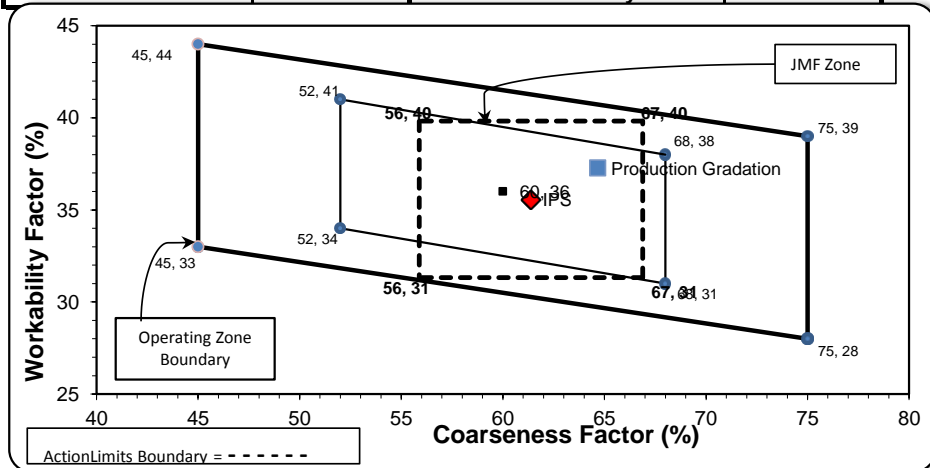


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*Maximum % Retained must be above the 3/8" sieve.
 *Any two adjacent sieves must equal 13% except max., nom. max., #100 and #200 sieves.
 *% Retained must be at least 5% for each sieve except max., nom. max., #100 and #200 sieves.
 *% Retained must be at least 8% for the 1" sieve when a 2" max. size (nom. Max. 1.5") aggregate is used.

Production Gradation Batch Plant Gradations Aggregate Supplier Gradations

Coarseness Factor: **65** Workability Factor: **37**



Initial Production Sample (IPS)

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"	89.1	10.2	10.9
1/2"	70.5	18.6	29.5
3/8"	60.5	10.0	39.5
#4	44.1	16.4	55.9
#8	35.6	8.5	64.4
#16	27.7	7.9	72.3
#30	20.6	7.1	79.4
#50	8.7	11.8	91.3
#100	1.6	7.1	98.4
LBW	1.1	0.6	98.9

PREPARED BY:
 SM, LLC Technical Service

Approved By: