# Aggregate Optimization Chart

MIX ID'S: DDD0K7E7, DDD0K7E8 and DDD0K7E9

## Production Gradation Report

**PLANT #:** **P-102**

Contractor: _____

Sample Date: 2/5/18

Concrete Grade: **DM**

Dates Test Represents: 2/5/2018 to 2/11/2018

MDOT No.: _____

| Agg. Class | Pit # | Source | Weight (SSD) | ft³ | Specific Gravity | % Contribution |
|---|---|---|---|---|---|---|
| 6AA | 58-003 | Stoneco | 1400 | 8.34 | 2.69 | 46.7 |
| 26A | 58-003 | Stoneco | 395 | 2.35 | 2.69 | 13.2 |
| 2NS | 63-114 | AA Highland | 1200 | 7.26 | 2.65 | 40.1 |
| | | **Total Wt** | **2995** | **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" | 71.4 | 100.0 | 100.0 | 86.6 | 13.4 | 13.4 |
| 1/2" | 33.4 | 100.0 | 100.0 | 68.9 | 17.8 | 31.1 |
| 3/8" | 12.8 | 88.6 | 100.0 | 57.7 | 11.1 | 42.3 |
| #4 | 2.3 | 18.3 | 99.8 | 43.5 | 14.3 | 56.5 |
| #8 | 0.8 | 4.8 | 88.0 | 36.3 | 7.2 | 63.7 |
| #16 | 0.5 | 2.0 | 67.4 | 27.5 | 8.8 | 72.5 |
| #30 | 0.4 | 1.5 | 45.5 | 18.6 | 8.9 | 81.4 |
| #50 | 0.4 | 1.4 | 14.7 | 6.3 | 12.4 | 93.7 |
| #100 | 0.4 | 1.3 | 2.2 | 1.2 | 5.0 | 98.8 |
| LBW | 0.3 | 1.2 | 0.3 | 0.4 | 0.8 | 99.6 |

*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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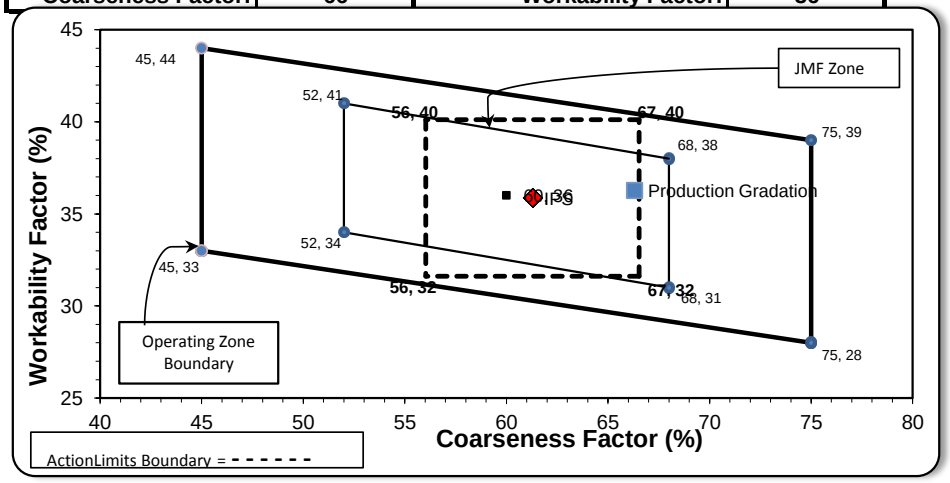
Production Gradation ○ Batch Plant Gradations ◉ Aggregate Supplier Gradations

| Coarseness Factor: | 66 | Workability Factor: | 36 |
|---|---|---|---|




Intial 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" | 89.2 | 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:

Approved By: