

# Aggregate Optimization Chart

## Production Gradation Report

**PLANT #:** **P-O2**

Sample Date: 2/17/25

Concrete Grade: **S2M, 3500HP**

Dates Test Represents: 2/18/2025 through 2/24/2025

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

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

| Agg. Class      | Pit #  | Source       | Weight (SSD) | ft <sup>3</sup> | Specific Gravity | % Contribution |
|-----------------|--------|--------------|--------------|-----------------|------------------|----------------|
| 6AA             | 71-47  | Presque Isle | 1520         | 9.30            | 2.62             | 49.8           |
| 26A             | 71-47  | Presque Isle | 300          | 1.83            | 2.62             | 9.8            |
| 2NS             | 63-115 | Ray Rd       | 1230         | 7.44            | 2.65             | 40.3           |
| <b>Total Wt</b> |        |              | <b>3050</b>  | <b>18.57</b>    |                  | <b>100.0</b>   |

<----- 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"    | 97.8  | 100.0 | 100.0 | 98.9                 | 1.1        | 1.1                   |
| 3/4"  | 82.1  | 100.0 | 100.0 | 91.1                 | 7.8        | 8.9                   |
| 1/2"  | 34.0  | 93.8  | 100.0 | 66.5                 | 24.6       | 33.5                  |
| 3/8"  | 16.3  | 77.5  | 100.0 | 56.1                 | 10.4       | 43.9                  |
| #4    | 2.9   | 16.3  | 98.7  | 42.9                 | 13.2       | 57.1                  |
| #8    | 2.0   | 5.0   | 80.1  | 33.8                 | 9.1        | 66.2                  |
| #16   | 1.7   | 3.1   | 64.9  | 27.3                 | 6.5        | 72.7                  |
| #30   | 1.6   | 2.7   | 49.4  | 21.0                 | 6.3        | 79.0                  |
| #50   | 1.6   | 2.5   | 24.4  | 10.9                 | 10.1       | 89.1                  |
| #100  | 1.5   | 2.3   | 5.0   | 3.0                  | 7.9        | 97.0                  |
| LBW   | 1.2   | 2.0   | 1.0   | 1.2                  | 1.8        | 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.



**Superior Materials, LLC**

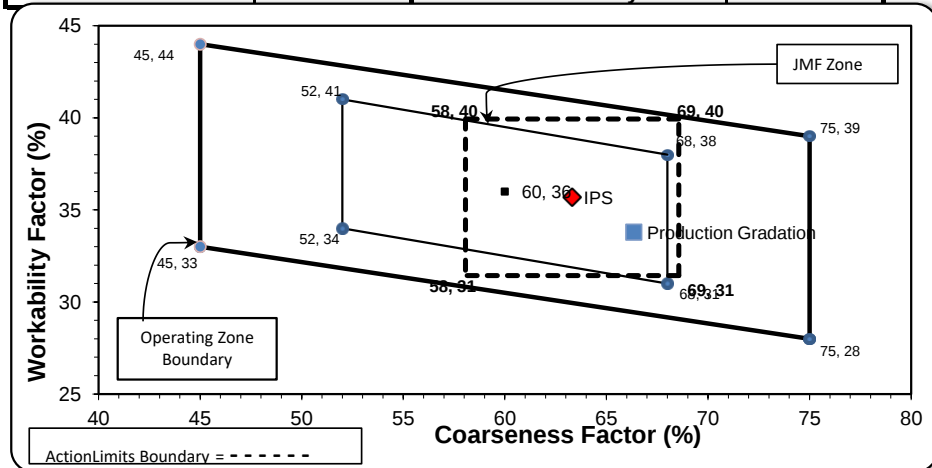
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Farmington Hills, MI 48336

Production Gradation ☐ Batch Plant Gradations ☒ Aggregate Supplier Gradations

|                           |           |                            |           |
|---------------------------|-----------|----------------------------|-----------|
| <b>Coarseness Factor:</b> | <b>66</b> | <b>Workability Factor:</b> | <b>34</b> |
|---------------------------|-----------|----------------------------|-----------|



Initial Production Sample (IPS)

|                     |                         |               |                          |
|---------------------|-------------------------|---------------|--------------------------|
| Coarseness Factor:  |                         | 63            |                          |
| Workability Factor: |                         | 36            |                          |
| Sieve               | Cumulative<br>% Passing | %<br>Retained | Cumulative<br>% Retained |
| 2"                  | 100.0                   | 0.0           | 0.0                      |
| 1.5"                | 100.0                   | 0.0           | 0.0                      |
| 1"                  | 100.0                   | 0.0           | 0.0                      |
| 3/4"                | 95.6                    | 4.4           | 4.4                      |
| 1/2"                | 73.1                    | 22.6          | 26.9                     |
| 3/8"                | 59.3                    | 13.8          | 40.7                     |
| #4                  | 42.8                    | 16.5          | 57.2                     |
| #8                  | 35.7                    | 7.1           | 64.3                     |
| #16                 | 28.9                    | 6.8           | 71.1                     |
| #30                 | 20.7                    | 8.2           | 79.3                     |
| #50                 | 9.9                     | 10.8          | 90.1                     |
| #100                | 2.1                     | 7.8           | 97.9                     |
| LBW                 | 0.9                     | 1.2           | 99.1                     |

PREPARED BY:  
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Approved By: