



## Concrete Cylinder Test Report

### PROJECT INFO - DRAFT ONLY

ASTM C31, ASTM C39, AASHTO T23, AASHTO T22, ASTM C172, AASHTO R60

|                          |                               |                   |                         |
|--------------------------|-------------------------------|-------------------|-------------------------|
| Client                   | HRC                           | Date Of Placement | 10/23/2020              |
| Project Name             | HMA Resurfacing 20+ Locations | Specimen Type     | Concrete Cylinder       |
| Project Number           | 2019086C                      | Contractor        | merlo                   |
| Project Location         | Detroit, MI                   | Concrete Supplier | Superior Materials, LLC |
| MDOT Job Number          | 205935A, 207914A              | Field Tested By   | Diego Riley             |
| MDOT Control Section     | 82000                         | Date Issued       | 10/23/2020              |
| Results Recorded In      | English Units                 |                   |                         |
| Supplier Mix Description | Structure Adjustment          |                   |                         |

### DESIGN PARAMETER

|                                   |                   |                |      |                                    |
|-----------------------------------|-------------------|----------------|------|------------------------------------|
| Mix Design Number                 | 0675 P155ERCQA032 |                |      |                                    |
| Design Compressive Strength (psi) | 3500              |                |      |                                    |
| Air (% Max)                       | 8.5               | Slump (in Max) | 6.00 | Unit Weight (lbs/ft <sup>3</sup> ) |
| Air (% Min)                       | 5.5               | Slump (in Min) | 3.50 |                                    |

### TESTING DATA

|        |       |                                                                                                                                                    |
|--------|-------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| Placed | 29.00 | +/- yds <sup>3</sup> /ft <sup>3</sup> of concrete at the following location: ADA replacement SB M-39 service drive from Joy Rd to Paul St, Detroit |
|--------|-------|----------------------------------------------------------------------------------------------------------------------------------------------------|

| Time Tested | Truck Num | Slump ASTM C143 (in) | Air ASTM C231 or C173 (%) | Unit Weight ASTM C138 (lbs/ft <sup>3</sup> ) | Air Temp (°F) | Mix Temp ASTM C1064 (°F) | Concrete Cylinder Set | Water Added (gal) | Cumulative Concrete Placed At Test (yds <sup>3</sup> /ft <sup>3</sup> ) |
|-------------|-----------|----------------------|---------------------------|----------------------------------------------|---------------|--------------------------|-----------------------|-------------------|-------------------------------------------------------------------------|
| 10:00 AM    | 3203      | 5.25                 | 8.40                      | 0.0                                          | 68            | 74                       | 1                     | 0                 | 1                                                                       |

### MATERIAL DATA

| Concrete Cylinder Set | Concrete Cylinder Num | Diameter (in) | X-Sec Area (in <sup>2</sup> ) | Weight (lbs) | Fracture Type | Capping Process | Age Of Concrete Cylinder (Days) | Date Tested | Total Load At Failure (lbs) | Cumulative Strength (psi/mpa) |
|-----------------------|-----------------------|---------------|-------------------------------|--------------|---------------|-----------------|---------------------------------|-------------|-----------------------------|-------------------------------|
| 1                     | 81244                 |               |                               |              |               |                 | 28                              | 11/20/2020  |                             |                               |
| 1                     | 81245                 |               |                               |              |               |                 | 28                              | 11/20/2020  |                             |                               |

**Average 28 Day Compressive Strength (psi): 0**

\*Cylinders tested with Unbonded Caps followed ASTM C1231, cylinders tested with Bonded Caps followed ASTM C617.

\*All Air Content % tests were performed per C231 unless otherwise noted in the remarks.

\*Inspector was notified of non-conformance items, if any.

\*Average Compressive Strength results did not meet project specifications.

|                      |             |
|----------------------|-------------|
| Remarks:             |             |
| Results Reported To: |             |
| Report Approved By:  | Diego Riley |