

**ASPHALT DENSITY  
DETERMINATION REPORT**

DATE: 8/21/2020

JOB NUMBER: 2020073E (PW-7018)

PROJECT NAME: HMA Mill &amp; Resurfacing 2020

LOCATION: Detroit, MI

GAUGE NUMBER: 2127

CLIENT: CoD/WSP

OWNER: City of Detroit (CoD)

CONTRACTOR: AJAX

PROJECT ENGINEER: Jason Lukasik, P.E.

WEATHER: Sunny

| TEST PERFORMED ON:                                                      |        | X     | WEARING COURSE (WC)   |             |               | LEVELING COURSE (LC) |        |                       | BASE COURSE (BC) |                                 |                   | OTHER    |          |  |
|-------------------------------------------------------------------------|--------|-------|-----------------------|-------------|---------------|----------------------|--------|-----------------------|------------------|---------------------------------|-------------------|----------|----------|--|
| STRUCTURE: Mainline                                                     |        |       |                       |             |               |                      |        |                       |                  |                                 |                   |          |          |  |
| TEST                                                                    |        |       | WET DENSITY           |             | MOISTURE      |                      |        | DENSITY               |                  | TEST LOCATION                   |                   |          |          |  |
| ORIG.                                                                   | RETEST | DEPTH | DENSITY COUNTS        | WET DENSITY | MOIST. COUNTS | MOIST.               | MOIST. | MAX DENSITY           | COMPACT.         | STATIONING/LOCATION             | OFFSET OF CL (FT) |          | COURSE   |  |
|                                                                         |        | INCH  | DC                    | PCF         | MC            | PCF                  | %      | PCF                   | %                |                                 | LEFT              | RIGHT    |          |  |
| 34                                                                      |        | BS    | 702                   | 149.8       | 52            | 6.4                  | 4.5    | 156.2                 | 95.9             | 42.3518, -83.0717               | 15                |          | WC       |  |
| 35                                                                      |        | BS    | 731                   | 146.8       | 57            | 7.1                  | 5.1    | 156.2                 | 94               | 42.3522, -83.0702               | 8                 |          | WC       |  |
| 36                                                                      |        | BS    | 749                   | 145         | 50            | 6.1                  | 4.5    | 156.2                 | 92.8             | 42.3523, -83.0701               | 20                |          | WC       |  |
| 37                                                                      |        | BS    | 737                   | 146.2       | 50            | 6.1                  | 4.4    | 156.2                 | 93.6             | 42.3529, -83.0682               | 11                |          | WC       |  |
| 38                                                                      |        | BS    | 732                   | 146.7       | 58            | 7.3                  | 5.2    | 156.2                 | 93.9             | 42.3528, -83.0682               | 15                |          | WC       |  |
| 39                                                                      |        | BS    | 735                   | 146.3       | 61            | 7.7                  | 5.6    | 156.2                 | 93.7             | 42.3530, -83.0675               | 13                |          | WC       |  |
| 40                                                                      |        | BS    | 737                   | 146.1       | 64            | 8.1                  | 5.9    | 156.2                 | 93.5             | 42.3536, -83.0659               | 18                |          | WC       |  |
| 41                                                                      |        | BS    | 703                   | 149.7       | 52            | 6.4                  | 4.5    | 156.2                 | 95.8             | 42.3538, -83.0652               | 14                |          | WC       |  |
| 42                                                                      |        | BS    | 721                   | 147.8       | 58            | 7.3                  | 5.2    | 156.2                 | 94.6             | 42.3544, -83.0637               | 17                |          | WC       |  |
| 43                                                                      |        | BS    | 727                   | 147.2       | 54            | 6.7                  | 4.8    | 156.2                 | 94.2             | 42.3548, -83.0629               | 13                |          | WC       |  |
| 44                                                                      |        | BS    | 707                   | 149.3       | 51            | 6.3                  | 4.4    | 156.2                 | 95.6             | 42.3555, -83.0613               | 9                 |          | WC       |  |
| MAXIMUM DETERMINATION (LAB)                                             |        |       |                       |             |               |                      |        |                       |                  | PRESCALE                        |                   |          |          |  |
| NOTE: Gmb to Marshall conversion is $Gmb * 62.4 (PCF) = MARSHALL (PCF)$ |        |       |                       |             |               |                      |        |                       |                  | 16                              |                   | 16       |          |  |
| NOTE: Gmm to TMD conversion is $Gmm * 62.4 (PCF) = TMD (PCF)$           |        |       |                       |             |               |                      |        |                       |                  | DENSITY                         |                   | MOISTURE |          |  |
| MAXIMUM WET DENSITY BY:                                                 |        |       | MARSHALL/Gmb 95.0%    |             |               | X                    |        | TMD/Gmm 92.0% - 96.0% |                  |                                 | DENSITY           |          | MOISTURE |  |
|                                                                         |        |       | TMD/Gmm 92.0% - 97.0% |             |               |                      |        | TMD/Gmm 92.0% - 98.0% |                  |                                 | READING 1         |          | 2739 418 |  |
| REMARKS:                                                                |        |       |                       |             |               |                      |        |                       |                  | READING 2                       |                   | 2747 422 |          |  |
| Tests 1-44 were taken on Forest between Trumbull to John R.             |        |       |                       |             |               |                      |        |                       |                  | READING 3                       |                   | 2733 420 |          |  |
|                                                                         |        |       |                       |             |               |                      |        |                       |                  | READING 4                       |                   | 2755 419 |          |  |
|                                                                         |        |       |                       |             |               |                      |        |                       |                  | OPERATING STANDARDS (READING 5) |                   |          |          |  |
|                                                                         |        |       |                       |             |               |                      |        |                       |                  | DENSITY                         |                   | MOISTURE |          |  |
|                                                                         |        |       |                       |             |               |                      |        |                       |                  | 2749                            |                   | 422      |          |  |
| SOMAT FIELD REPRESENTATIVE: Ryan Castillo                               |        |       |                       |             |               |                      |        |                       |                  | DATE: 8/21/2020                 |                   |          |          |  |
| SOMAT PROJECT MANAGER(s): Steve Drummond, P.E.                          |        |       |                       |             |               |                      |        |                       |                  | DATE: 8/28/2020                 |                   |          |          |  |

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