## MICHIGAN DEPARTMENT OF TRANSPORTATION

## SUPPLEMENTAL SPECIFICATION FOR ERRATA TO THE 2020 STANDARD SPECIFICATIONS

## 1 of 13

04-30-25

| Page | Subsection | Errata   |
|------|------------|--|
| 1-06 | 101.02     | Delete the second abbreviation of the list on this page reading:<br>"IESIlluminating Engineering Society   |
| 1-06 | 101.02     | Add the abbreviation to the list on this page reading:<br>"IESNA Illuminating Engineering Society of North America   |
| 1-07 | 101.02     | Change the first abbreviation of the list on this page to read:<br>MMUTCDMichigan Manual on Uniform Traffic Control Devices  |
| 1-83 | 108.05.A.2 | In the first paragraph of this subsection change the language "MDOT Form 1130" to read "MDOT Form 1130A".  |
| 1-88 | 108.08.D   | Move the last paragraph of this subsection to the left one indent to align with the first paragraph of the subsection and not with the subsection 108.08.D.3.  |
| 2-29 | 205.03.P.1 | Delete the first sentence of this subsection and replace with the following:<br>"Do not dispose of material, temporarily or permanently, beyond the normal plan fill slope across wetlands or floodplains."  |
| 2-30 | 205.03.P.2 | Delete the first sentence of this subsection and replace with the following:<br>"Do not dispose of material, temporarily or permanently, in wetlands or floodplains."  |
| 2-30 | 205.03.P.3 | Delete the second paragraph of this subsection and replace with<br>the following:<br>"Contact the appropriate regulatory agencies to determine whether<br>an area is a regulated wetland or floodplain before disposing of<br>surplus or unsuitable material in areas outside the right-of-way and<br>not shown on the plans as disposal sites." |
| 2-30 | 205.03.P.3 | Delete the first sentence of the third paragraph of this subsection<br>and replace with the following:<br>"Immediately move to an upland site any surplus or unsuitable<br>material that was disposed of in portions of wetlands or floodplains<br>not shown on the plans as disposal sites, at no additional cost to<br>the Department."        |

| 2-30 | 205.03.P.4 | Delete the first sentence of this subsection and replace with the following:<br>"The Department will notify the applicable regulatory agencies if the Department becomes aware that the Contractor disposed of surplus or unsuitable material in portions of a wetland or floodplain not shown on the plans."  |
|------|------------|--|
| 3-31 | 308.04.D   | Change the subsection title from "D. General." to read "A. General."   |
| 4-5  | 401.03.A   | Delete the fourth sentence of the second paragraph on this page of<br>this subsection and replace it with the following:<br>"Place the backfill up to 4 inches below the proposed bottom of the<br>pipe and cover with geotextile separator."  |
| 4-7  | 401.03.E   | Delete the third sentence of the second paragraph of this subsection and replace with the following:<br>"Use precast or cast-in-place footings for precast end sections as required."  |
| 4-8  | 401.03.E   | Delete the first sentence of the fourth paragraph on this page of this<br>subsection and replace with the following:<br>"When discharging stormwater directly to waters of the state,<br>permanently label all end sections or other piped points of<br>stormwater entry with "MDOT" or the local agency's name in a<br>conspicuous location that will remain visible after construction." |
| 4-11 | 401.04     | Change the eighth pay item from the bottom of the list on this page to read as follows:<br>Culv End Sect inch, GrateEach   |
| 4-11 | 401.04.A.3 | Delete this subsection in its entirety and replace it with the following:<br>"3. Providing and placing culvert bedding, culvert, and geotextile<br>blanket;"   |
| 4-12 | 401.04.C.4 | Change this subsection to read:<br>"The Engineer will measure Culv End Sect inch, Grate by each<br>as shown on the plans for the size of grate required."  |
| 4-16 | 402.03.A   | Delete the fourth sentence of the third paragraph on this page of<br>this subsection and replace it with the following:<br>"Place the backfill up to 4 inches below the proposed bottom of the<br>pipe and cover with geotextile separator."   |
| 4-21 | 402.03     | Add a new subsection to the end of subsection 402.03 on this page reading as follows:<br>"K. <b>Outfall Labeling.</b> Label all stormwater outfalls directly discharging to waters of the state in accordance with subsection 401.03.E.  |

| 4-21 | 402.04.A   | Delete the last sentence of this subsection and replace it with the following:<br>"The unit price for <b>Sewer</b> and <b>Sewer, Reinf Conc, Ellip</b> includes the cost of excavation, bedding, backfill, geotextile blanket, and  |
|------|------------|---|
|      |            | conducting mandrel testing if required."  |
| 4-33 | 404.03.D.1 | Delete this subsection in its entirety and replace it with the following:<br>"1. Foundation, Bank, Subbase and Subgrade Underdrains.<br>Backfill using granular material Class IIAA."   |
| 4-39 | 406.02     | Change the third line in the list of materials to read:<br>Coarse Aggregate 6A, 6AA, 17A902   |
| 4-41 | 406.03.A.3 | Delete the third paragraph of this subsection and replace with the following:<br>"Design joints between adjacent box culvert sections in accordance with Section 9 of ASTM C1577 and to accommodate the joint sealing material in accordance with section 914 as applicable."         |
| 4-50 | 406.03.G.3 | Change the first sentence of the first paragraph to read:<br>"Unless otherwise shown on the plans, construct culvert bedding for<br>box culverts by placing a 9-inch-thick layer of 46G aggregate,<br>covered with a 3-inch-thick layer of 34G, 34R aggregate, or<br>approved equal." |
| 4-51 | 406.03.G.3 | Add the following sentence to the end of the second paragraph of this subsection:<br>"The cold applied joint sealer must completely cover the external rubber gasket with the placement limits matching the width of the geotextile blanket."   |
| 4-52 | 406.04.B   | In the second paragraph of this subsection delete the first sentence<br>and replace with the following:<br>"The Department will pay separately for cast-in-place concrete,<br>other than for culvert segments, headwalls, wingwalls, aprons, and<br>curtain walls."                   |
| 5-26 | 502.02     | Delete the first sentence of the subsection and the listed materials in this subsection.  |
| 5-26 | 502.02.A   | Add the following to the end of the first sentence in this subsection: "(914.04A)"  |
| 5-26 | 502.02.B   | Add the following to the end of the first sentence in this subsection: "(502.02B)"  |
| 5-35 | 503.04     | Change the first paragraph to read:<br>"The unit price for <b>Paver-Placed Surface Seal</b> , of the type required,<br>includes the cost of preparing the surface, and placing a membrane<br>and paver placed surface seal course for full-width coverage,                            |

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|      |            | except that the Department will pay pavement markings in accordance with s  |  |
| 5-46 | 504.04.A   | Change the first paragraph to read:<br>"A. <b>General</b> . The unit prices for <b>Micro-S</b><br>type required, include cleaning existing p<br>coat, stationing, corrective action, and t<br>corrective action."   | avement, applying a bond   |
| 6-20 | 602.04     | Delete the fifteenth pay item of the list or<br>"Shoulder, Reinf Conc   |  |
| 6-20 | 602.04     | Change the sixteenth thru the eighteenth<br>read as follows:<br>Shld, Nonreinf Conc<br>Shld, Nonreinf Conc, High Performance .<br>Shld, Freeway   | Square Yard<br>Square Yard   |
| 6-21 | 602.04.B.1 | Delete this subsection and replace with t<br>"Shld, Nonreinf Conc; and Shld,<br>Performance. The Engineer will measur<br>pay for, Shld, Nonreinf Conc; and Sh<br>Performance by area, based on plan qua<br>subsection 109.01."  | <b>Nonreinf Conc, High</b><br>e, and the Department will<br><b>Id, Nonreinf Conc, High</b>                         |
| 6-21 | 602.04.B.2 | Delete this subsection and replace with t<br>"ShId, Freeway. The Engineer will mean<br>will pay for, ShId, Freeway based on pla<br>with subsection 109.01. If the Contract<br>shoulder, the unit price for ShId, Freewa<br>transverse joints in the shoulder and<br>pavement joints." | sure, and the Department<br>n quantities in accordance<br>tor uses concrete for the<br>ay includes the cost of the |
| 6-23 | 602.04.F   | Add the following sentence to the end of<br>subsection:<br>Temporary concrete pavement, pavem<br>obstruction, pavement areas less tha<br>pavement less than 3 feet wide will not b  | nent within 4 feet of an<br>n 300 square yards, or   |
| 6-23 | 602.04.F   | Delete the following language from this s<br>"The Engineer will not core the following:   |  |
|      |            | 1. Temporary concrete pavement;   |  |
|      |            | 2. Pavement within 4 feet of an obstruction   | on;  |
|      |            | 3. Pavement areas less than 300 square  | yards; or  |
|      |            | 4. Pavement less than 3 feet wide."   |  |
| 6-24 | 602.04     | Rename the following subsections as foll  | lows:  |

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| 0.04         | CO2 04           | "1. Initial Core.  |
|--------------|------------------|--|
| 6-24<br>6-24 | 602.04<br>602.04 | <ol> <li>Additional Cores.</li> <li>Price Adjustment for Thickness.</li> </ol>                 |
| 6-24<br>6-25 | 602.04           | 4. Price Adjustments for Steel Locations within the Pavement.                                  |
| 6-26         | 602.04           | 5. Remove and Replace."  |
| 0-20         | 002.04           |  |
| 6-29         | 603.02           | Change the first sentence in the last paragraph in this subsection                             |
|              |                  | to read:   |
|              |                  | "Provide coarse aggregate with no greater than 2.5% absorption in accordance with AASHTO T85." |
| 7-11         | 705.02           | Change the second sentence in the last paragraph in this                                       |
|              |                  | subsection to read:  |
|              |                  | "Provide natural aggregate and with no greater than 2.50%                                      |
|              |                  | absorption as specified in AASHTO T85 for structure concrete."                                 |
| 7-29         | 706.02           | Change the first sentence in the seventh paragraph in this                                     |
|              |                  | subsection to read:  |
|              |                  | "Provide natural aggregate and with no greater than 2.50%                                      |
|              |                  | absorption as specified in AASHTO T85 for structure concrete."                                 |
| 7-107        | 709.04           | Change the Pay Unit on the second pay item from the top of the list                            |
|              |                  | on this page to read as follows:   |
|              |                  | Thousand Board Foot  |
| 7-115        | 711.02           | Change the first sentence in the last paragraph in this subsection                             |
|              |                  | to read:   |
|              |                  | "Provide natural aggregate with a maximum absorption of 2.50% in                               |
|              |                  | accordance with AASHTO T85."   |
| 7-120        | 712.02           | Change the first sentence in the sixth paragraph in this subsection                            |
|              |                  | to read:   |
|              |                  | "Provide concrete containing natural aggregate with a maximum                                  |
|              |                  | absorption of 2.50% in accordance with AASHTO T85."  |
| 7-185        | 718.02           | Change the first sentence in the last paragraph in this subsection                             |
|              |                  | to read:   |
|              |                  | "Provide concrete with natural aggregate with a maximum  |
|              |                  | absorption of 2.50% in accordance with AASHTO T85."  |
| 8-12         | 804.03.B.2       | Change the first sentence in this subsection to read:  |
|              |                  | "Cast in place light standard and sign support foundations using                               |
|              |                  | fixed forms in accordance with the MDOT Standard Plan R-50                                     |
|              |                  | series."   |
| 8-27         |                  | Change the last pay item at the bottom of this page to read as                                 |
|              |                  | follows:   |
|              |                  | Guardrail Anch, Bridge, Det, CurvedEach  |
| 8-44         | 810.03.J.9       | Add a period to the end of the third sentence in this subsection.                              |

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| 8-53 | 810.03.V    | Add a period to the end of the second sentence of the first paragraph of this subsection.   |
|------|-------------|---|
| 8-53 | 810.04      | Change the fourth pay item from the top of the list on this page to read as follows:<br>Post, Steel, poundFoot  |
| 8-53 | 810.04      | Change the last four pay items at the bottom of this page to read as follows:<br>Fdn, Truss Sign Structure Type, inch dia, CasedFoot<br>Fdn, Truss Sign Structure Type, inch dia, UncasedFoot<br>Fdn, Cantilever Sign Structure Type, inch dia, CasedFoot<br>Fdn, Cantilever Sign Structure Type, inch dia, Uncased.Foot  |
| 8-55 | 810.04.B.1  | Delete the second paragraph of this subsection and replace with the following:<br>"The unit prices for Fdn, Truss Sign Structure Type, inch dia, Cased and Fdn, Cantilever Sign Structure Type, inch dia, Cased include the cost of concrete, slurry, steel reinforcement, permanent casings, anchor bolts, excavation, and disposal of excavated material."  |
| 8-55 | 810.04.B.2  | Delete this subsection and replace with the following:<br>"Foundation, Truss Sign Structure, Uncased and Foundation,<br>Cantilever Sign Structure, Uncased. The unit prices for Fdn,<br>Truss Sign Structure Type, inch dia, Uncased and Fdn,<br>Cantilever Sign Structure Type, inch dia, Uncased include<br>the cost of concrete, slurry, steel reinforcement, temporary casings,<br>anchor bolts, excavation, and disposal of excavated material." |
| 8-57 | 810.04.I    | Delete the first paragraph of this subsection and replace with the following:<br>"The unit price for <b>Sign, Rem</b> of the type required includes the cost of removing signs from supports and stacking by shape and size."   |
| 8-57 | 810.04.I    | Delete the second paragraph of this subsection and replace with<br>the following:<br>"The unit prices for <b>Ground Mtd Sign Supports, Rem</b> ; <b>Cantilever,</b><br><b>Rem</b> and <b>Truss, Rem</b> include the cost of removing ground mounted<br>sign supports, cantilever or truss supports."  |
| 8-57 | 810.04.L    | Change this subsection to read:<br>"The unit price for Sign, Erect, Salv of the type required includes<br>erecting the salvaged sign on a new sign support or existing sign<br>support, as shown on the plans, and attaching devices, and<br>hardware, including brackets."   |
| 8-93 | 812.03.D.14 | Add the following paragraph after the second paragraph in this subsection:<br>"If the temporary rumble strips lose their adhesion to the pavement during the life of the project, replace or re-adhere them, as directed  |

by the Engineer. Upon completion of the project, or as directed by the Engineer, entirely remove the temporary rumble strips using a method that does not permanently damage the pavement surface."

- 8-95 812.03.D.14 Delete the third, fourth, fifth and sixth paragraphs of this subsection.
- 8-110 812.04 Change the fifth and sixth pay item from the top of the list on this page to read as follows:
- 8-141 815.04.C.1.b Delete this subsection in its entirety.
- 8-141 815.04.C.1.c Rename and change this subsection as follows: "b. Removal and disposal of unacceptable plants including the root ball.
- 8-141 815.04.C.1.d Delete this subsection in its entirety.

8-142 815.04.C.2.d Change this subsection to read: "During the first watering of the second growing season, remove and dispose of the guying material, identification tags, and inspection tags."

- 8-144 816.03.A Change the third sentence in this subsection to read: "Use topsoil from within the project limits; or from off-site sources meeting the requirements in subsection 917.06."
- 8-167 818.04 Add the pay item to the bottom of the list on this page as follows: Power Company (Estimated Cost to Contractor)...... Dollar
- 8-170 818.04.G Delete this subsection in its entirety.
- 8-170 818.04 Rename the following subsections as follows:
- "G. Handholes (Hh). 8-171
  - H. Service Disconnect. 818.04
  - 818.04 Metered Service.
- 8-171 818.04 J. Unmetered Service. 8-172
  - 818.04 K. Wood Pole.

8-171

8-171

- 8-172 818.04 L. Concrete Pole, Fit Up.
- M. Steel Pole, Fit Up. 8-172 818.04
- N. Bracket Arm." 8-172 818.04
  - 818.04.J Delete the second paragraph of this subsection and replace with the following: "The pay item, Power Company (Estimated Cost to Contractor),

establishes a budgeted amount in the contract to cover the cost of reimbursing the Contractor for payments made to the power company for providing electrical power at the locations shown on the plans. The Department will estimate the reimbursement costs to the Contractor and establish a budgeted amount as shown on

company invoices paid, as submitted to the Engineer." 819 03 B 5 b In the second paragraph of this subsection delete the first sentence and replace with the following: "Tighten bolts connecting the pole to the frangible base to a snug tight condition in accordance with subsection 707.03.E.6.c." 820.01.B Add a period to the end of the first sentence of this subsection. Change the first line in the list of materials on this page to read: 820.03.O In the fourth paragraph of this subsection delete the last sentence and replace with the following: "Use smooth wall, Schedule 80, rigid PVC conduit, or coilable,

the plans. The Department will pay the Contractor for power

- Schedule 80 PE conduit in accordance with section 818." 8-199 Add the pay item to the list on this page: 820.04
- TS, (number) Way (type) Mtd (LED) Optic

8-176

8-185

8-187

8-196

820.02

- 8-200 820.04 Change the second pay item from the top of the list on this page to read as follows: TS Head, Temp ......Each
- 8-200 820.04 Change the eleventh pay item from the top of the list on this page to read as follows: TS, Lens, Pedestrian Sym (LED) .....Each 8-200 820.04 Delete the following pay items from the list: Strain Pole, Steel, 6 bolt, \_\_ foot.....Each Mast Arm Pole, Cat\_\_....Each Mast Arm, Foot, Cat.....Each
- 8-200 820.04 Change the eleventh pay item from the bottom of the list on this page to read as follows: Mast Arm, Rem.....Each
- 8-200 820.04 Delete the following pay item from the list: Pushbutton, Pedestal, Alum......Each 8-201 820.04 Delete the following pay item from the list: Pushbutton, Pedestal, Rem ......Each
- 8-201 Delete the following pay item from the list: 820.04 Power Co. (Est Cost to Contractor)...... Dollar 8-202 820.04 Add the following pay item to the list: Bracket, Truss, Salv.....Each
- 8-204 820.04.C Delete the last paragraph of this subsection in its entirety.

| 8-204 | 820.04.D     | Delete the first paragraph of this subsection in its entirety.  |
|-------|--------------|---|
| 8-205 | 820.04.E     | Delete the sixth paragraph of this subsection in its entirety.  |
| 8-205 | 820.04.E     | Delete the seventh paragraph of this subsection in its entirety.  |
| 8-205 | 820.04.E     | Change the eighth paragraph to read:<br>"The unit price for <b>Pedestal, Pushbutton, Alum</b> includes the cost<br>of installing the aluminum pushbutton pedestal assembly, installing<br>hardware, fittings, grounding, and ground rod." |
| 8-205 | 820.04.E     | Change the nineth paragraph to read:<br>"The unit price for <b>Pedestal, Pushbutton, Rem</b> includes the cost<br>of removing the pedestal assembly and hardware."  |
| 9-5   | 902.02       | Delete the first line under the Material list and relace with the following:<br>"Wire Cloth and Sieves ASTM E11"  |
| 9-9   | 902.03.C.1.b | Delete the first sentence in this subsection and replace with the following:<br>"The physical requirements for the coarse aggregate are as specified in Table 902-2 and as follows:"  |
| 9-14  | Table 902-1  | In the row that includes the information on the 34G material, under<br>the column titled Item of Work by Section Number (Sequential)<br>delete the reference to the section 404.  |
| 9-15  | Table 902-2  | Add the superscript (n) in the first row in the Dense-graded aggregates section of the table under the column titled Crushed Material, % min. (MTM 117).  |
| 9-16  | Table 902-2  | Add the superscript (n) in the first row in the Open-graded aggregates section of the table under the column titled Crushed Material, % min. (MTM 117).   |
| 9-16  | Table 902-2  | Delete the superscript footnote in the first through fourth rows under<br>the header row that reads "(m)" in the column Loss, % max, LA<br>Abrasion (MTM 102).  |
| 9-16  | Table 902-2  | Add the following row after the third row in the Open-graded<br>aggregates section reading:46R45  |
| 9-16  | Table 902-2  | Add the superscript footnote in the header row that reads "(m)" in the column Loss, % max, LA Abrasion (MTM 102).   |
| 9-15  | Table 902-2  | Delete the footnote (d) in one location in the table.   |

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- 9-17 Table 902-2 Delete the footnote (d) in one location in the table.
- 9-17 Table 902-2 Add the following footnote below the existing footnotes in this table. "(n) For recycled crushed concrete, if the source concrete uses primarily rounded river gravel aggregates, the minimum crushed particle content can be reduced to 90%."
- 9-21 Table 902-6 Delete the footnote (b) in two locations in the table.
- 9-21 Table 902-6 Change the footnote (c) to read (b) in two locations in the table.
- 9-21 Table 902-6 Change the footnote (d) to read (c) in two locations in the table.
- 9-25 903.04 Delete the second sentence of the second paragraph of this subsection.
- 9-70 909.07.A Delete the second sentence of this subsection.
- 9-70 909.05.D Change the first sentence in this subsection to read: "Provide steel pipe for jacking in place meeting the requirements of ASTM A53/A53M for Type E or Type S, Grade B, or ASTM A139/A139M for Grade B."
- 9-71 909.08.A Change the first sentence in this subsection to read: "Provide bridge deck downspouts of PE pipe meeting the requirements of ASTM F714, PE 4710, DR 26 or Schedule 80 PVC.
- 9-94 Table 910-01 Change the value in the fifth row under the header row in the Permittivity (min) (per second) column from 0.5 to read: "0.05"
- 9-94 Table 910-01 Change the value in the seveth row under the header row in the Permittivity (min.) (per second) column from 0.5 to read: "0.05"
- 9-95 Table 910-2 Change the second row under the Ultimate strength section to read: "CMD<sup>(c)</sup> 1950 lb/ft"
- 9-119 913.06 Change this subsection to read: Circular precast concrete units with circular reinforcement for adjusting rings, tops, risers, and sump bases for manholes, catch basins, and inlets must meet the requirements of AASHTO M199 and the following additions and exceptions:
- 9-133 917.03 Rename the four subsections following the first paragraph on this page as follows:
  - D. Deciduous Shade Trees.
  - E. Small Trees, Ornamentals, and Shrubs.
  - F. Evergreen Trees.
  - G. Vines, Ground Cover, and Herbaceous Ornamental Plants.

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| 9-149 | 918.08        | In the first paragraph of this subsection defined and replace with the following:<br>"Provide light standards designed in accurate LRFD Specifications for Structural Supp<br>Luminaires, and Traffic Signals."   | ordance with AASHTO's   |
| 9-150 | 918.10        | In the first paragraph of this subsection dele<br>replace with the following:<br>"Provide tower lighting units designe<br>AASHTO's LRFD Specifications for S<br>Highway Signs, Luminaires, and Traffic Si   | d in accordance with<br>Structural Supports for                                       |
| 9-164 | 919.04.B      | In the first paragraph of this subsection delereplace with the following:<br>"Provide square tubular steel sign suppor<br>mechanical, and geometric properties of n<br>tests referenced in AASHTO's LRFD Spe<br>Supports for Highway Signs, Luminaires, a | ts meeting the chemical,<br>naterial used in the crash<br>ecifications for Structural |
| 9-170 | 920.02.C      | Change the reference to Table 920-2 to locations.   | read Table 920-3 in two   |
| 9-218 | 922.06        | Add the following subsection after subsect<br>"D. <b>Temporary Rumble Strips (Ora</b><br>temporary rumble strip consists of<br>4-inch material.   | nge). The completed   |
|       |               | Apply the primer to the surface of recommended by the manufacturer surface of the rumble strip on the pavement surface, as recommended Seat the rumble strips with a minim 200-pound weighted roller.   | . Place the pre-adhesive<br>primer or directly on the<br>ed by the manufacturer.      |
|       |               | Provide temporary rumble strips t<br>polymer with pre-applied adhesive<br>strength of 250 psi. Provide prime<br>manufacturer's recommendations."  | e, orange, and a tensile  |
| 9-222 | 922.10.A.3    | Delete this subsection and replace with the<br>"Conform to the wind load requirements<br>LRFD Specifications for Structural Supp<br>Luminaires, and Traffic Signals with all equ<br>the need for additional ballast;"                                     | specified by AASHTO's orts for Highway Signs,   |
| 10-5  | 1001.03.A.4.m | Delete this subsection and replace it with t<br>"m. Contractor's signature or initials when   |   |
| 10-15 | 1002.03.A.9   | Delete this subsection and replace it with 1<br>"9. AASHTO T177 - Standard Method of T<br>of Concrete (Using Simple Beam with Cer   | Fest for Flexural Strength  |

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| 10-23    | 1003.03.B      | Delete the last sentence of this subsection and replace with the following:<br>"Aggregate sampling for concrete will be performed by an MCAT-certified Aggregate Technician Level II." |
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| 10-42    | Table 1006-01  | Change footnote (a) to read:<br>"(a) Ensure that the coarse aggregate's absorption does not<br>exceed 2.5% in accordance with AASHTO T85."   |
| 10-43    | Table 1006-02  | Replace Table 1006-02 with the Table 1006-02 below.  |
| 1A - 20A | Pay Item Index | Replace the Pay Item Index in its entirety.  |

## Table 1006-2: Overlay Mixtures

|                 |                            |                 |             |                       | Mixture Proportions Ib/yd³, dry weight |   |                    |                         |                         |                    |
|-----------------|----------------------------|-----------------|-------------|-----------------------|--|---|--------------------|-------------------------|-------------------------|--------------------|
| Mixture<br>Type | Aggregate                  | Slump<br>(inch) | Air Content | Admixture<br>Required | Cement <sup>(a)</sup>                  | Dry Densified<br>Silica Fume <sup>(b)</sup> |                    | Fine Agg                | Coarse<br>Agg           | Latex<br>Admixture |
| SFMC            | 2NS and 26A <sup>(c)</sup> | 4–6             | 6.5 ±1.5%   | (d),(e),(f)           | 618                                    | 40  | 273 <sup>(g)</sup> | 1273                    | 1601                    | _                  |
| LMC             | 2NS and 26A <sup>(c)</sup> | (h)             | 4.5 ±1.5%   | _                     | 658                                    |   | (h)                | 1490 <sup>(i),(j)</sup> | 1300 <sup>(i),(j)</sup> | 206                |

(a) Use only Type I or Type IL Portland cement.

(c) Provide coarse aggregate, 95% minimum crushed materials in accordance with Michigan Test Method (MTM) 117, with an absorption no greater than 2.5%, in accordance with AASHTO T85.

(d) Water-reducing high-range admixture or water-reducing high-range and retarding admixture.

(e) Virgin polypropylene collated fibers at 2 lb/yd<sup>3</sup>.

(f) Air-entraining admixture.

(g) Provide a net water to cementitious material ratio of 0.41 (cementitious material includes cement and silica fume).

 Aggregate proportions are approximate; due to gradation changes, the Contractor may increase proportions by no greater than 5% by weight of total aggregate if reducing coarse aggregate by an equivalent volume.

(j) Aggregate weights specified in the table are based on a dry bulk specific gravity of 2.65 for gravel and stone. Adjust the weights if the specific gravity of the materials used varies by more than 0.02 from the specified values.

<sup>(</sup>b) For SFMC mixtures, the Contractor may use a blended silica fume Portland cement. However, if the silica fume content of the blended material is greater than 8% of the total cementitious material, submit to the Engineer modified mix proportions with Type I Portland cement added to the blended material to achieve the equivalent individual cementitious material mixture proportions.

<sup>(</sup>h) Add water in addition to water in the latex admixture to control slump to within 3 to 5 inches. Measure slump from 4 to 5 minutes after discharge from the mixer. During the waiting period, deposit concrete on the deck and do not disturb. If placing mixtures on sections within superelevated curves, the Contractor may need to use the lower allowable range of the slump requirement, as determined by the Engineer. Do not exceed water-cement ratio, by weight, of 0.30 including water contained in the latex emulsion.