



2012 Standard Specifications for Construction

Warranty No FHWA Oversight No
DBE % Yes NHS No

ITEM NUMBER
1404 071

**STATE OF MICHIGAN DEPARTMENT OF TRANSPORTATION
PROPOSAL**

2.30 mi of hot mix asphalt cold milling and resurfacing, trenching, widening for center turn lane, culvert replacements, aggregate base, and pavement markings on Division Street from south of 146th Avenue to the Kent County line and on Division Street north of 147th Avenue, Allegan County.

BIDS WILL BE ELECTRONICALLY DOWNLOADED AT 10:30 AM LOCAL TIME, ON 4/4/14

| <u>CONTRACT ID</u> | <u>CONTROL SECTION</u> | <u>PROJECT</u> | <u>FEDERAL NO.</u> | <u>FED. ITEM</u> |
|--------------------|------------------------|----------------|--------------------|------------------|
| 03555-119342 | CM 03400 | 120967A | CM 1403(006) | RR8684 |
| | ER 03005 | 122218A | ER 1403(008) | RR8701 |
| | STL 03555 | 119342A | STP 1403(009) | TT0268 |

The bidder has downloaded and examined the plans, specifications, special provisions, and related materials in the proposal, as well as the location of the work described in the proposal for this project, and has obtained all addenda issued for this project, and is fully informed as to the nature of the work and the conditions relating to its performance and understands that the quantities shown are approximate only and are subject to either increase or decrease.

The bidder hereby proposes to furnish all necessary machinery, tools, apparatus, and other means of construction, do all the work, furnish all the materials except as otherwise specified and, for each unit price, lump sum, or one each named in the itemized bid, to complete the work in strict conformity with the plans therefore and the entire proposal which is incorporated by reference in these pages, and in strict conformity with the requirements of the 2012 Standard Specifications for Construction, Michigan Department of Transportation and such other special provisions and supplemental specifications as may be a part of the proposal for this project.

The bidder further proposes to do such extra work as may be authorized by the Department, prices for which are not included in the itemized bid. Compensation shall be made on the basis agreed upon before such extra work is begun.

The bidder hereby certifies that if it is not prequalified in all classifications required by the advertisement for this project, it has taken such preparatory steps as may be necessary and will within the time specified in Subsection 102.15 of the 2012 Standard Specifications for Construction, designate subcontractor(s) that are fully prequalified in the classification(s) to perform the work.

THE BIDDER UNDERSTANDS AND AGREES THAT THE DEPARTMENT RESERVES THE RIGHT TO REJECT ANY AND ALL BIDS AND NO CONTRACTUAL RELATIONSHIP SHALL EXIST BETWEEN THE BIDDER AND THE DEPARTMENT FOR THE WORK DESCRIBED HEREIN UNTIL SUCH TIME AS THE CONTRACT HAS BEEN FORMALLY EXECUTED BY BOTH THE BIDDER AND THE DEPARTMENT.

The bidder agrees upon submitting this bid that its agents, officers or employees have not directly or indirectly entered into any agreements, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with this proposal for the above project.

Unless the bidder gives MDOT advance written notice, MDOT may correspond directly with the insurance agencies concerning questions and problems with the insurance certificates, bonds and related materials. It is the obligation of the bidder to monitor the filing of the insurance certificates, bond, and related materials with MDOT and the bidder is responsible for any failure to provide MDOT with the required materials, on a timely basis and in proper form.

Subject to Subsection 102.17 of the 2012 Standard Specifications for Construction, the bidder agrees to pay to the Michigan Department of Transportation the bid guaranty sum of **\$50,000.00** if the bidder fails to provide the required materials and/or execute the contract in accordance with Subsection 102.15 of the 2012 Standard Specifications for Construction.

Kalamazoo TSC

BIDDER INFORMATION FOR CONSTRUCTION BIDDING

Electronic Bid – The electronic bid consists of the following section folders: Schedule of Items, Designated and Specialty Items, DBE Goal (if applicable), Warranty Obligations, Addenda Acknowledgment and Instructions.

The Instructions folder provides an explanation for each section of the electronic bid including the agreement for the bid guaranty sum. The bid guaranty is NOT required at the time of bidding, or with submitting an electronic bid.

Subject to Subsection 102.17, of the 2012 Standard Specifications for Construction, the Bidder agrees to pay to the Michigan the bid guaranty sum if the Bidder fails to provide the required materials and/or execute the contract in accordance with the 2012 Standard Specifications for Construction within twenty-eight (28) days after being sent the necessary award documents.

All written and electronic addendums issued for project(s) the Bidder elects to bid, must be obtained prior to submitting the electronic bid.

Electronic bids must be submitted by the 10:30 a.m. deadline on the scheduled letting date.

NOTE: Any financial or propriety information submitted with the electronic bid will become a public record subject to disclosure under the Freedom of Information Act. THE INFORMATION WILL NOT BE TREATED AS CONFIDENTIAL.

The apparent low Bidder is determined following a review for any discrepancies in the bid and where all requirements of the bid and apparent low Bidder are met.

THE RIGHT IS RESERVED TO REJECT ANY OR ALL BIDS

Revised 9/15/2011

SCHEDULE OF ITEMS

REVISED:

CONTRACT ID: 03555-119342 PROJECT(S): 119342A
 LETTING : 140404 120967A
 CALL : 071 122218A

CONTRACTOR : _____

| LINE NO | ITEM DESCRIPTION | APPROX. QUANTITY AND UNITS | UNIT PRICE | | BID AMOUNT | |
|---------|------------------|----------------------------|------------|-----|------------|-----|
| | | | DOLLARS | CTS | DOLLARS | CTS |

SECTION 0001 Road Work

IMPORTANT NOTICE:

If the proposal establishes a maximum price for any of the following work items, and if you bid a price higher than that maximum price, your bid will be considered to have quoted the maximum price and your bid total will be adjusted to reflect that maximum price.

If the proposal provides a specified price for any of the following work items, and if you bid a price higher or lower than that specified price, your bid will be considered to have quoted the specified price and your bid total will be adjusted to reflect that specified price.

If your bid is the lowest accepted bid, and if you refuse to accept the award of the contract due to the change in what you quoted as a maximum or specified price, you will forfeit your bid guaranty.

| | | | | | | |
|------|---|------|--------|------|--|--|
| 0010 | 1500001 Mobilization, Max. _____ \$231200.00 | LUMP | | LUMP | | |
| 0020 | 2020002 Tree, Rem, 19 inch to 36 inch | Ea | 5.000 | | | |
| 0030 | 2020003 Tree, Rem, 37 inch or Larger | Ea | 5.000 | | | |
| 0040 | 2020004 Tree, Rem, 6 inch to 18 inch | Ea | 31.000 | | | |
| 0050 | 2020006 Stump, Rem, 19 inch to 36 inch | Ea | 9.000 | | | |
| 0060 | 2020007 Stump, Rem, 37 inch or Larger | Ea | 5.000 | | | |

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|---------|---|----------------------------|------------|-----|------------|-----|
| | | | DOLLARS | CTS | DOLLARS | CTS |
| 0070 | 2020008 Stump, Rem, 6 inch to 18 inch | 5.000 Ea | . | | . | |
| 0080 | 2030001 Culv, Rem, Less than 24 inch | 36.000 Ea | . | | . | |
| 0090 | 2030002 Culv, Rem, 24 inch to 48 inch | 1.000 Ea | . | | . | |
| 0100 | 2030005 Culv, End, Rem, Less than 24 inch | 4.000 Ea | . | | . | |
| 0110 | 2030011 Dr Structure, Rem | 14.000 Ea | . | | . | |
| 0120 | 2030015 Sewer, Rem, Less than 24 inch | 1,682.000 Ft | . | | . | |
| 0130 | 2040020 Curb and Gutter, Rem | 359.000 Ft | . | | . | |
| 0140 | 2040045 Masonry and Conc Structure, Rem | 60.000 Cyd | . | | . | |
| 0150 | 2040060 Structures, Rem | LUMP | LUMP | | . | |
| 0160 | 2047011 _ Pavt, Rem, Modified | 5,697.000 Syd | . | | . | |
| 0170 | 2050041 Subgrade Undercutting, Type II | 5,700.000 Cyd | . | | . | |

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|---------|--|----------------------------|------------|-----|------------|-----|
| | | | DOLLARS | CTS | DOLLARS | CTS |
| 0180 | 2057002 _ Excavation, Earth, Modified | 24.000 Sta | . | | . | |
| 0190 | 2060002 Backfill, Structure, CIP | 1,638.000 Cyd | . | | . | |
| 0200 | 2060010 Excavation, Fdn | 1,395.000 Cyd | . | | . | |
| 0210 | 2080012 Erosion Control, Check Dam, Stone | 200.000 Ft | . | | . | |
| 0220 | 2080020 Erosion Control, Inlet Protection, Fabric Drop | 11.000 Ea | . | | . | |
| 0230 | 2080026 Erosion Control, Maintenance, Sediment Removal | 60.000 Cyd | . | | . | |
| 0240 | 2080034 Erosion Control, Sediment Trap | 7.000 Ea | . | | . | |
| 0250 | 2080036 Erosion Control, Silt Fence | 1,000.000 Ft | . | | . | |
| 0260 | 2090001 Project Cleanup | LUMP | LUMP | | . | |
| 0270 | 3010002 Subbase, CIP | 20,763.000 Cyd | . | | . | |
| 0280 | 3020001 Aggregate Base | 15,361.000 Ton | . | | . | |

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|---------|--|----------------------------|------------|-----|------------|-----|
| | | | DOLLARS | CTS | DOLLARS | CTS |
| 0290 | 3070021 Approach, Cl II | 425.000 Ton | . | | . | |
| 0300 | 3070043 Approach, Cl III, LM | 100.000 Cyd | . | | . | |
| 0310 | 3070127 Shoulder, Cl II, 5 inch | 3,726.000 Syd | . | | . | |
| 0320 | 3077002 _ Trenching, Modified | 76.000 Sta | . | | . | |
| 0330 | 3077011 _ Approach, Cl I, 6 inch, Modified | 4,556.000 Syd | . | | . | |
| 0340 | 3077011 _ Approach, Special | 163.000 Syd | . | | . | |
| 0350 | 3080005 Geotextile, Separator | 1,000.000 Syd | . | | . | |
| 0360 | 3080010 Geotextile, Stabilization | 1,000.000 Syd | . | | . | |
| 0370 | 4010018 Culv End Sect, 18 inch | 9.000 Ea | . | | . | |
| 0380 | 4010024 Culv End Sect, 24 inch | 4.000 Ea | . | | . | |
| 0390 | 4010541 Culv, Cl E, 18 inch | 336.000 Ft | . | | . | |

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|---------|--|----------------------------|------------|-----|------------|-----|
| | | | DOLLARS | CTS | DOLLARS | CTS |
| 0400 | 4010542 Culv, Cl E, 24 inch | 88.000 Ft | . | | . | |
| 0410 | 4010607 Culv, Cl F, 12 inch | 460.000 Ft | . | | . | |
| 0420 | 4010609 Culv, Cl F, 18 inch | 1,060.000 Ft | . | | . | |
| 0430 | 4010610 Culv, Cl F, 24 inch | 240.000 Ft | . | | . | |
| 0440 | 4017001 _ Culv, Perf, 18 inch | 870.000 Ft | . | | . | |
| 0450 | 4020006 Sewer, Cl A, 18 inch, Tr Det A | 20.000 Ft | . | | . | |
| 0460 | 4020007 Sewer, Cl A, 24 inch, Tr Det A | 731.000 Ft | . | | . | |
| 0470 | 4020036 Sewer, Cl A, 24 inch, Tr Det B | 206.000 Ft | . | | . | |
| 0480 | 4020603 Sewer, Cl E, 24 inch, Tr Det B | 84.000 Ft | . | | . | |
| 0490 | 4021275 Video Taping Sewer and Culv Pipe | 5,546.000 Ft | . | | . | |
| 0500 | 4027001 _ Sewer, Perf, 12 inch | 280.000 Ft | . | | . | |

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|---------|---|----------------------------|------------|-----|------------|-----|
| | | | DOLLARS | CTS | DOLLARS | CTS |
| 0510 | 4027001 _ Sewer, Perf, 18 inch | 722.000 Ft | . | | . | |
| 0520 | 4027001 _ Sewer, Perf, 24 inch | 820.000 Ft | . | | . | |
| 0530 | 4030005 Dr Structure Cover, Adj, Case 1 | 15.000 Ea | . | | . | |
| 0540 | 4030006 Dr Structure Cover, Adj, Case 2 | 5.000 Ea | . | | . | |
| 0550 | 4030040 Dr Structure Cover, Type G | 11.000 Ea | . | | . | |
| 0560 | 4030065 Dr Structure Cover, Type Q | 20.000 Ea | . | | . | |
| 0570 | 4030210 Dr Structure, 48 inch dia | 9.000 Ea | . | | . | |
| 0580 | 4030220 Dr Structure, 60 inch dia | 2.000 Ea | . | | . | |
| 0590 | 4030250 Dr Structure, Add Depth of 48 inch dia, 8 foot to 15 foot | 10.000 Ft | . | | . | |
| 0600 | 4030306 Dr Structure, Tap, 6 inch | 5.000 Ea | . | | . | |
| 0610 | 4030318 Dr Structure, Tap, 18 inch | 1.000 Ea | . | | . | |

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|---------|---|----------------------------|------------|-----|------------|-----|
| | | | DOLLARS | CTS | DOLLARS | CTS |
| 0620 | 4040073 Underdrain, Subgrade, 6 inch | 216.000 Ft | . | | . | |
| 0630 | 4040093 Underdrain Outlet, 6 inch | 130.000 Ft | . | | . | |
| 0640 | 4040113 Underdrain, Outlet Ending, 6 inch | 13.000 Ea | . | | . | |
| 0650 | 4047001 _ Underdrain, Subgrade, Open-Graded, 6 inch, Modified | 4,000.000 Ft | . | | . | |
| 0660 | 4060005 Culv Bedding, Box Culv | 96.000 Cyd | . | | . | |
| 0670 | 4060151 Culv, Precast Conc Box, 12 foot by 10 foot | 108.000 Ft | . | | . | |
| 0680 | 5010002 Cold Milling HMA Surface | 8,465.000 Syd | . | | . | |
| 0690 | 5010008 Pavt for Butt Joints, Rem | 164.000 Syd | . | | . | |
| 0700 | 5010052 HMA, 4E10 | 8,448.000 Ton | . | | . | |
| 0710 | 5010058 HMA, 5E10 | 3,233.000 Ton | . | | . | |
| 0720 | 5010061 HMA Approach | 1,023.000 Ton | . | | . | |

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| | | | DOLLARS | CTS | DOLLARS | CTS |
| 0730 | 5017011 _ HMA Surface, Rem, Modified | 15,171.000 Syd | . | . | . | . |
| 0740 | 6030005 Cement | 5.000 Ton | . | . | . | . |
| 0750 | 8010007 Driveway, Nonreinf Conc, 8 inch | 293.000 Syd | . | . | . | . |
| 0760 | 8020016 Curb and Gutter, Conc, Det B2 | 533.000 Ft | . | . | . | . |
| 0770 | 8050010 Curb Sloped, HMA | 475.000 Ft | . | . | . | . |
| 0780 | 8070095 Post, Mailbox | 43.000 Ea | . | . | . | . |
| 0790 | 8110063 Pavt Mrkg, Ovly Cold Plastic, Lt Turn Arrow Sym | 8.000 Ea | . | . | . | . |
| 0800 | 8110068 Pavt Mrkg, Ovly Cold Plastic, Only | 2.000 Ea | . | . | . | . |
| 0810 | 8110231 Pavt Mrkg, Waterborne, 4 inch, White | 13,598.000 Ft | . | . | . | . |
| 0820 | 8110450 Recessing Pavement Markings, Longit | 16,687.000 Ft | . | . | . | . |
| 0830 | 8110541 Pavt Mrkg, Modified Urethane, 4 inch, Yellow | 16,687.000 Ft | . | . | . | . |

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| | | | DOLLARS | CTS | DOLLARS | CTS |
| 0840 | 8120010 Barricade, Type III, High Intensity, Double Sided, Furn | 15.000 Ea | . | | . | |
| 0850 | 8120011 Barricade, Type III, High Intensity, Double Sided, Oper | 15.000 Ea | . | | . | |
| 0860 | 8120140 Lighted Arrow, Type C, Furn | 2.000 Ea | . | | . | |
| 0870 | 8120141 Lighted Arrow, Type C, Oper | 2.000 Ea | . | | . | |
| 0880 | 8120170 Minor Traf Devices | LUMP | LUMP | | . | |
| 0890 | 8120210 Pavt Mrkg, Longit, 6 inch or Less Width, Rem | 500.000 Ft | . | | . | |
| 0900 | 8120231 Pavt Mrkg, Type NR, Tape, 4 inch, Yellow, Temp | 2,300.000 Ft | . | | . | |
| 0910 | 8120240 Pavt Mrkg, Type R, 4 inch, White, Temp | 2,000.000 Ft | . | | . | |
| 0920 | 8120241 Pavt Mrkg, Type R, 4 inch, Yellow, Temp | 1,000.000 Ft | . | | . | |
| 0930 | 8120250 Plastic Drum, High Intensity, Furn | 200.000 Ea | . | | . | |
| 0940 | 8120251 Plastic Drum, High Intensity, Oper | 200.000 Ea | . | | . | |

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| | | | DOLLARS | CTS | DOLLARS | CTS |
| 0950 | 8120330 Sign, Portable, Changeable Message, Furn | 2.000 Ea | . | | . | |
| 0960 | 8120331 Sign, Portable, Changeable Message, Oper | 2.000 Ea | . | | . | |
| 0970 | 8120350 Sign, Type B, Temp, Prismatic, Furn | 1,533.000 Sft | . | | . | |
| 0980 | 8120351 Sign, Type B, Temp, Prismatic, Oper | 1,533.000 Sft | . | | . | |
| 0990 | 8120370 Traffic Regulator Control | LUMP | LUMP | | . | |
| 1000 | 8130005 Riprap, Heavy | 140.000 Syd | . | | . | |
| 1010 | 8130010 Riprap, Plain | 50.000 Syd | . | | . | |
| 1020 | 8160100 Slope Restoration, Type A | 8,240.000 Syd | . | | . | |
| 1030 | 8160101 Slope Restoration, Type B | 24,508.000 Syd | . | | . | |
| 1040 | 8160102 Slope Restoration, Type C | 934.000 Syd | . | | . | |
| 1050 | 8210001 Monument Box | 5.000 Ea | . | | . | |

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| 1060 | 8210010 Monument Preservation | 5.000 Ea | . | | . | |
| 1070 | 8230096 Hydrant, Relocate, Case 2 | 16.000 Ea | . | | . | |
| 1080 | 8230422 Water Shutoff, Adj, Case 2 | 4.000 Ea | . | | . | |
| 1090 | 8230431 Gate Box, Adj, Case 1 | 15.000 Ea | . | | . | |
| 1100 | 8230432 Gate Box, Adj, Case 2 | 11.000 Ea | . | | . | |
| 1110 | 8237050 _ Water Main Conflict, Relocate | 2.000 Ea | . | | . | |
| 1120 | 8240001 Contractor Staking | LUMP | LUMP | | . | |
| 1130 | 8240020 Staking Plan Errors and Extras, One Person | 8.000 Hr | . | | . | |
| 1140 | 8240021 Staking Plan Errors and Extras, Two Person | 8.000 Hr | . | | . | |
| 1150 | 8240022 Staking Plan Errors and Extras, Three Person | 3.000 Hr | . | | . | |
| 1160 | 8507021 _ Culvert Fill, Special | 173.000 Cyd | . | | . | |

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| | | | DOLLARS | CTS | DOLLARS | CTS |
| 1170 | 8507040 _ Exploratory Investigation, Modified | 20.000 Hr | . | | . | |
| | SECTION 0001 TOTAL | | | | | . |
| | TOTAL BID | | | | | . |

DESIGNATED and SPECIALTY ITEMS

DESIGNATED ITEMS:

**COMPANY NAME AND ADDRESS OF
PREQUALIFIED SUBCONTRACTOR
DOING WORK:**

(Cb) Plant-Mixed Hot Mix Asphalt/ Bituminous
Paving

(COMPANY NAME)

(COMPANY ADDRESS)

(Ea) Grading, Drainage Structures, and
Aggregate Construction

(COMPANY NAME)

(COMPANY ADDRESS)

(COMPANY NAME)

(COMPANY ADDRESS)

(COMPANY NAME)

(COMPANY ADDRESS)

(COMPANY NAME)

SPECIALTY ITEMS:

(COMPANY ADDRESS)

(COMPANY NAME)

(COMPANY ADDRESS)

**SEE NEXT PAGE FOR INFORMATION ON
COMPLETING THIS PAGE**

INFORMATION ON COMPLETION OF DESIGNATED AND SPECIALTY ITEMS PAGE

The contractor may sublet the item(s) of work stipulated on the DESIGNATED and SPECIALTY ITEMS page in this bid in accordance with Section 1.08.01 of the 2012 Standard Specifications, Section VII of the required provisions for Federal-Aid Contracts (with the exception noted in the following paragraph), and the following instructions.

The percentage of contract work performed by a contractor's own organization shall comply with Section 1.08.01 of the 2012 Standard Specifications, rather than the lower percentage allowed by Section VII of FHA required contract provisions (form FHWA 1273). Section 108.01 of the 2012 Standard Specifications requires forty percent (40%) performance by a contractor's own organization.

If the contractor **IS NOT** prequalified in EITHER the DESIGNATED or SPECIALTY ITEMS noted in this bid, the contractor MUST, prior to contract award, indicate the company name and address of a prequalified subcontractor in the space provided. If such company name is provided, the contractor MUST sublet the appropriate items to the prequalified subcontractor named, **unless the subcontractor is not prequalified at the time the work is to be performed, or the subletting of the item to another prequalified subcontractor is agreed to in writing by both the contractor and the named subcontractor.**

If the contractor **IS** prequalified in EITHER the DESIGNATED or SPECIALTY ITEMS noted in this bid and does not intend to do the work with its own forces, the contractor may indicate the company name and address of a prequalified subcontractor in the space provided. If such company name is provided, the contractor MUST sublet the appropriate items to the prequalified subcontractor named, **unless the subcontractor is not prequalified at the time the work is to be performed, or the subletting of the item to another prequalified subcontractor is agreed to in writing by both the contractor and the named subcontractor.**

If the contractor **IS** prequalified in the DESIGNATED or SPECIALTY ITEMS noted and NO subcontractor is named, any later decision to subcontract said items of work is subject to the sixty percent (60%) limitation of subcontracting.

At the time that a subcontractor is named in a bid to perform any of the DESIGNATED or SPECIALTY ITEMS, that subcontractor must be prequalified for the classification which includes the work it is to perform. In selecting a subcontractor, the prime contractor shall assure itself that the prospective subcontractor has sufficient equipment, working force, and supervision to complete the designated or specialty items to be subcontracted within the specified time limit.

It is understood and agreed that the prequalification of the subcontractor by the Department pursuant to 1933 P.A. 170 is not a guarantee or warranty of the subcontractor's ability to perform or complete the work contained herein.

Rev. (09/11)

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| 66 | 119342A-402-SP Culv Perf 18 inch |
| 68 | 119342A-402-SP Sewer Perf inch |
| 70 | 119342A-404-SP Underdrain Subgrade OpenGraded 6 inch Modified |
| 71 | 119342A-501-SP HMA Application |
| 73 | 119342A-501-SP HMA Surface Rem Modified |
| 74 | HMA Roller SP9-REVISED-7-13-11-vers |
| 77 | 119342A-823-SP Water Main Conflict Relocate |
| 78 | 119342A-850-SP Culvert Fill Special |
| 79 | 119342A-850-SP Exploratory Investigation Modified |
| 80 | Slope Restoration, Non Freeway-12RC816(A015)-4-25-12 |
| 83 | Special Provisions for this Project |
| 83 | 12SP102A CONTRACTOR PERFORMANCE EVALUATIONS |
| 85 | 12SP102(C) ELECTRONIC TRANSMITTAL OF CONTRACT DOCUMENTS |
| 86 | 12SP102(D) LOW BID WITHDRAWAL PRIOR TO CONTRACT AWARD |
| 87 | 12SP104(B) HIGH VISIBILITY CLOTHING |
| 88 | 12SP104(C) VALUE ENGINEERING CHANGE PROPOSAL (VECP) |
| 92 | 12SP105(A) SOURCE OF STEEL AND IRON (BUY AMERICA) |
| 95 | 12SP107(E) CONSTRUCTION STAGING AREAS |
| 96 | 12SP107(F) E-VERIFY |
| 97 | 12SP108C ON-THE-JOB TRAINING PROGRAM |
| 98 | 12SP109(A) PROMPT PAYMENT |

- 102 12SP208(A) NON-COMPLIANCE WITH SOIL EROSION AND SEDIMENTATION CONTROL REQUIREMENTS
- 104 12SP302(A) AGGREGATE BASE COURSE
- 105 12SP501(A) SAMPLING ASPHALT BINDER ON LOCAL AGENCY PROJECTS
- 106 12SP501(E) RECYCLED HOT MIX ASPHALT MIXTURE OF LOCAL AGENCY PROJECTS
- 107 12SP501(F) MARSHALL HOT MIX ASPHALT MIXTURE
- 109 12SP501(G) RECYCLED HOT MIX ASPHALT AND RECYCLED ASPHALT SHINGLES IN SUPERPAVE MIXTURES
- 112 12SP604(A) QUALITY CONTROL AND ACCEPTANCE OF PORTLAND CEMENT CONCRETE (FOR LOCAL AGENCY PROJECTS ONLY)
- 128 12SP811(C) LONGITUDINAL PAVEMENT MARKING REMOVAL
- 130 12SP811(F) RECESSED PAVEMENT MARKINGS
- 132 12SP811(L) MODIFIED URETHANE PAVEMENT MARKINGS
- 135 12SP812(A) MOBILE ATTENUATOR
- 139 12SP812(C) TRAFFIC CONTROL QUALITY AND COMPLIANCE
- 141 12SP812(F) PAYMENT FOR MINOR TRAFFIC DEVICES AND TRAFFIC REGULATOR CONTROL
- 142 12SP812(L) SUPPORTS FOR TEMPORARY SIGNS
- 143 12SP812(M) SECURITY OF PORTABLE CHANGEABLE MESSAGE SIGNS
- 144 12SP902(A)
- 145 12SP902(C) CRUSHED CONCRETE NEAR WATER
- 146 12SP902(D) ALTERNATIVE GRANULAR MATERIALS FOR FILL AND SUBBASE
- 147 12SP912(A) MICRONIZED COPPER WATER BASED WOOD PRESERVATIVE SYSTEMS
- 148 12SP920(A) PAVEMENT MARKING MATERIALS
- 149 12SP920(B) GLASS BEADS USED FOR PAVEMENT MARKINGS
- 150 Notice to Bidders for this Project
 - 150 119342A-823-NTB Penalty for Casting Out of Tolerance (Sanitary)
 - 151 119342A-823-NTB Penalty for Casting Out of Tolerance (Water Valve Box)
 - 152 12NB01 INSURANCE
 - 153 12NB03 Dissemination of Public Relations Information
 - 154 12NB07 JOINT/TWO-PARTY CHECKS
 - 156 12NB10 CERTIFIED PAYROLLS
 - 157 12NB13 MULTIPLE WAGE DECISIONS
 - 158 12NB14 LABOR COMPLIANCE
 - 159 12NB15 BID RIGGING
 - 160 12NB17 NOTICE TO CONTRACTORS/CONSULTANTS FRAUD AND ABUSE HOTLINE
 - 161 12NB18 ROAD CONSTRUCTION APPRENTICESHIP READINESS (RCAR) Program
 - 163 12NB23 USE OF CRUSHED CONCRETE FOR DENSE-AND OPEN-GRADED AGGREGATES AND GRANULAR MATERIAL
 - 164 12NB60 BUY AMERICA
- 165 Coordination Clause
- 166 Utility Coordination
- 168 Supplemental Specifications
- 168 12SS001(A) ERRATA TO THE 2012 STANDARD SPECIFICATIONS
- 187 Notice of Bidders - Contact Person
- 188 Attachments
- 201 Labor Rates
- 233 Federal-Aid Construction Contracts

| <u>CONTROL SECTION</u> | <u>PROJECT</u> | <u>FEDERAL NO.</u> | <u>FEDERAL ITEM NO.</u> |
|------------------------|----------------|--------------------|-----------------------------|
| STL 03555 | 119342A | STP 1403(009) | TT 0268 |
| CM 03400 | 120967A | CM 1403(006) | RR 8684 |
| ER 03005 | 122218A | ER 1403(008) | RR 8701 |

TYPE OF WORK:

JN 119342A: 1.2 miles hot mix asphalt paving, hot mix asphalt surface remove, culverts, subbase, aggregate base, trenching, sewers, drainage structures, pavement marking, traffic control, restoration.

JN 120967A: 1.1 mi of cold milling HMA surface, trenching and widening, culverts, aggregate base, HMA paving, and pavement markings to include a center optional left-turn lane

JN 122218A: Precast box culvert, structures remove, backfill structure, excavation foundation, hot mix asphalt, traffic control.

LOCATION:

JN 119342A: Division Street, 1000 Feet south of 146th to Kent County line, Allegan County.

JN 120967A: Division Street, from 1,000' south of 146th Avenue north to the Allegan / Kent County line in Dorr and Leighton Townships, Allegan County.

JN 122218A: Division Street, Division Street 200 ft. north of 147th Avenue, Allegan County.

OWNER:

Allegan County Road Commission

MDOT Oversight

Letting of: April 04, 2014

Notice of Advertisement

10:30 A.M. , Local Time VANWAGONER BLDG, 1ST FLR ONE WEST CONF
425 W. OTTAWA ST., LANSING, MI 48933

| ITEM NO | CONTRACT ID | CONTROL | SEC. | JOB NO. | FEDERAL NO. | FED ITEM |
|---------|------------------|---------|-------|---------|---------------|----------|
| 1404 | 071 03555-119342 | STL | 03555 | 119342A | STP 1403(009) | TT0268 |
| | | CM | 03400 | 120967A | CM 1403(006) | RR8684 |
| | | ER | 03005 | 122218A | ER 1403(008) | RR8701 |

2.30 mi of hot mix asphalt cold milling and resurfacing, trenching, widening for center turn lane, culvert replacements, aggregate base, and pavement markings on Division Street from south of 146th Avenue to the Kent County line and on Division Street north of 147th Avenue, Allegan County.

5.00 % DBE PARTICIPATION REQUIRED

Net classification required for this project is
2442 Cb or
2442 Ea

In addition to the above minimum prequalification requirement for prime contractors this project includes subclassifications of Cb and Ea. If the prime contractor is not prequalified in those subclassifications it must use prequalified subcontractors. Those subcontractors must be designated prior to award of the contract to the confirmed low bidder.

Estimated pages for plans: 27

See proposal for bidder guaranty information. Completion date is 10/31/14

Proposal and plans, if applicable, are available for examination online at <http://mdotcf.state.mi.us/public/eprop/login/index.cfm>

Dated: 03/10/14

GENERAL REQUIREMENTS FOR RECIPIENTS

Excerpts from USDOT Regulation 49 CFR, Part 26

A. **26.5 What Do The Terms Used In This Part Mean? *(Replaces 23.5 and 23.62)**

Insert the following portions:

Disadvantaged Business Enterprise or DBE means a for-profit small business concern—

(1) That is at least 51 percent owned by one or more individuals who are both socially and economically disadvantaged or, in the case of a corporation, in which 51 percent of the stock is owned by one or more such individuals; and

(2) Whose management and daily business operations are controlled by one or more of the socially and economically disadvantaged individuals who own it.

Small Business Concern means, with respect to firms seeking to participate as DBEs in DOT-assisted contracts, a small business concern as defined pursuant to section 3 of the Small Business Act and Small Business Administration regulations implementing it (13 CFR part 121) that also does not exceed the cap on average annual gross receipts specified in Sec. 26.65(b).

Socially and economically disadvantaged individual means any individual who is a citizen (or lawfully admitted permanent resident) of the United States and who is—

(1) Any individual who a recipient finds to be a socially and economically disadvantaged individual on a case-by-case basis.

(2) Any individual in the following groups, members of which are rebuttably presumed to be socially and economically disadvantaged:

(i) “Black Americans,” which includes persons having origins in any of the Black racial groups of Africa;

(ii) “Hispanic Americans,” which includes persons of Mexican, Puerto Rican, Cuban, Dominican, Central or South American, or other Spanish or Portuguese culture or origin, regardless of race;

(iii) “Native Americans,” which includes persons who are American Indians, Eskimos, Aleuts, or Native Hawaiians;

(iv) “Asian-Pacific Americans,” which includes persons whose origins are from Japan, China, Taiwan, Korea, Burma (Myanmar), Vietnam, Laos, Cambodia (Kampuchea), Thailand, Malaysia, Indonesia, the Philippines, Brunei, Samoa, Guam, the U.S. Trust Territories of the Pacific Islands, Macao, Fiji, Tonga, Kirbati, Juvalu, Nauru, Federated States of Micronesia, or Hong Kong;

(v) “Subcontinent Asian Americans,” which includes persons whose origins are from India, Pakistan, Bangladesh, Bhutan, the Maldives Islands, Nepal or Sri Lanka;

(vi) Women;

(vii) Any additional groups whose members are designated as socially and economically disadvantaged by the SBA, at such time as the SBA designation becomes effective.

Tribally-owned concern means any concern at least 51 percent owned by an Indian tribe as defined in this section.

You refers to a recipient, unless a statement in the text of this part or the context requires otherwise (i.e., ‘You must do XYZ’ means that recipients must do XYZ).

B. **26.1 What are the Objectives of this Part? *(Replaces 23.43)**

This part seeks to achieve several objectives:

(a) To ensure nondiscrimination in the award and administration of DOT-assisted contracts in the Department’s highway, transit, and airport financial assistance programs;

(b) To create a level playing field on which DBEs can compete fairly for DOT-assisted contracts;

(c) To ensure that the Department's DBE program is narrowly tailored in accordance with applicable law;

- (d) To ensure that only firms that fully meet this part's eligibility standards are permitted to participate as DBEs;
- (e) To help remove barriers to the participation of DBEs in DOT- assisted contracts;
- (f) To assist the development of firms that can compete successfully in the marketplace outside the DBE program; and
- (g) To provide appropriate flexibility to recipients of Federal financial assistance in establishing and providing opportunities for DBEs.

26.3 To Whom Does this Part Apply? **(Replaces 23.43)*

- (a) If you are a recipient of any of the following types of funds, this part applies to you:
 - (1) Federal-aid highway funds authorized under Titles I (other than Part B) and V of the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), Pub. L. 102-240, 105 Stat. 1914, or Titles I, III, and V of the Transportation Equity Act for the 21st Century (TEA-21), Pub. L. 105-178, 112 Stat. 107.
 - (2) Federal transit funds authorized by Titles I, III, V and VI of ISTEA, Pub. L. 102-240 or by Federal transit laws in Title 49, U.S. Code, or Titles I, III, and V of the TEA-21, Pub. L. 105-178.
 - (3) Airport funds authorized by 49 U.S.C. 47101, et seq.
- (b) [Reserved]
- (c) If you are letting a contract, and that contract is to be performed entirely outside the United States, its territories and possessions, Puerto Rico, Guam, or the Northern Marianas Islands, this part does not apply to the contract.
- (d) If you are letting a contract in which DOT financial assistance does not participate, this part does not apply to the contract.

26.13 What Assurances Must Recipients and Contractors Make? **(Replaces 23.43)*

- (a) Each financial assistance agreement you sign with a DOT operating administration (or a primary recipient) must include the following assurance:

The recipient shall not discriminate on the basis of race, color, national origin, or sex in the award and performance of any DOT-assisted contract or in the administration of its DBE program or the requirements of 49 CFR part 26. The recipient shall take all necessary and reasonable steps under 49 CFR part 26 to ensure nondiscrimination in the award and administration of DOT-assisted contracts. The recipient's DBE program, as required by 49 CFR part 26 and as approved by DOT, is incorporated by reference in this agreement. Implementation of this program is a legal obligation and failure to carry out its terms shall be treated as a violation of this agreement. Upon notification to the recipient of its failure to carry out its approved program, the Department may impose sanctions as provided for under part 26 and may, in appropriate cases, refer the matter for enforcement under 18 U.S.C. 1001 and/or the Program Fraud Civil Remedies Act of 1986 (31 U.S.C. 3801 et seq.).

- (b) Each contract you sign with a contractor (and each subcontract the prime contractor signs with a subcontractor) must include the following assurance:

The contractor, sub recipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of DOT- assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate.

C. 26.55 How is DBE Participation Counted Toward Goals? **(Replaces 23.47)*

- (a) When a DBE participates in a contract, you count only the value of the work actually performed by the DBE toward DBE goals.

(1) Count the entire amount of that portion of a construction contract (or other contract not covered by paragraph (a)(2) of this section) that is performed by the DBE's own forces. Include the cost of supplies and materials obtained by the DBE for the work of the contract, including supplies purchased or equipment leased by the DBE (except supplies and equipment the DBE subcontractor purchases or leases from the prime contractor or its affiliate).

(2) Count the entire amount of fees or commissions charged by a DBE firm for providing a bona fide service, such as professional, technical, consultant, or managerial services, or for providing bonds or insurance specifically required for the performance of a DOT-assisted contract, toward DBE goals, provided you determine the fee to be reasonable and not excessive as compared with fees customarily allowed for similar services.

(3) When a DBE subcontracts part of the work of its contract to another firm, the value of the subcontracted work may be counted toward DBE goals only if the DBE's subcontractor is itself a DBE. Work that a DBE subcontracts to a non-DBE firm does not count toward DBE goals.

(b) When a DBE performs as a participant in a joint venture, count a portion of the total dollar value of the contract equal to the distinct, clearly defined portion of the work of the contract that the DBE performs with its own forces toward DBE goals.

(c) Count expenditures to a DBE contractor toward DBE goals only if the DBE is performing a commercially useful function on that contract.

(1) A DBE performs a commercially useful function when it is responsible for execution of the work of the contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. To perform a commercially useful function, the DBE must also be responsible, with respect to materials and supplies used on the contract, for negotiating price, determining quality and quantity, ordering the material, and installing (where applicable) and paying for the material itself. To determine whether a DBE is performing a commercially useful function, you must evaluate the amount of work subcontracted, industry practices, whether the amount the firm is to be paid under the contract is commensurate with the work it is actually performing and the DBE credit claimed for its performance of the work, and other relevant factors.

(2) A DBE does not perform a commercially useful function if its role is limited to that of an extra participant in a transaction, contract, or project through which funds are passed in order to obtain the appearance of DBE participation. In determining whether a DBE is such an extra participant, you must examine similar transactions, particularly those in which DBEs do not participate.

(3) If a DBE does not perform or exercise responsibility for at least 30 percent of the total cost of its contract with its own work force, or the DBE subcontracts a greater portion of the work of a contract than would be expected on the basis of normal industry practice for the type of work involved, you must presume that it is not performing a commercially useful function.

(4) When a DBE is presumed not to be performing a commercially useful function as provided in paragraph (c)(3) of this section, the DBE may present evidence to rebut this presumption. You may determine that the firm is performing a commercially useful function given the type of work involved and normal industry practices.

(5) Your decisions on commercially useful function matters are subject to review by the concerned operating administration, but are not administratively appealable to DOT.

(d) Use the following factors in determining whether a DBE trucking company is performing a commercially useful function:

(1) The DBE must be responsible for the management and supervision of the entire trucking operation for which it is responsible on a particular contract, and there cannot be a contrived arrangement for the purpose of meeting DBE goals.

(2) The DBE must itself own and operate at least one fully licensed, insured, and operational truck used on the contract.

(3) The DBE receives credit for the total value of the transportation services it provides on the contract using trucks it owns, insures, and operates using drivers it employs.

(4) The DBE may lease trucks from another DBE firm, including an owner-operator who is certified as a DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services the lessee DBE provides on the contract.

(5) The DBE may also lease trucks from a non-DBE firm, including from an owner-operator. The DBE who leases trucks from a non-DBE is entitled to credit only for the fee or commission it receives as a result of the lease arrangement. The DBE does not receive credit for the total value of the transportation services provided by the lessee, since these services are not provided by a DBE.

(6) For purposes of this paragraph (d), a lease must indicate that the DBE has exclusive use of and control over the truck. This does not preclude the leased truck from working for others during the term of the lease with the consent of the DBE, so long as the lease gives the DBE absolute priority for use of the leased truck. Leased trucks must display the name and identification number of the DBE.

(e) Count expenditures with DBEs for materials or supplies toward DBE goals as provided in the following:

(1)(i) If the materials or supplies are obtained from a DBE manufacturer, count 100 percent of the cost of the materials or supplies toward DBE goals.

(ii) For purposes of this paragraph (e)(1), a manufacturer is a firm that operates or maintains a factory or establishment that produces, on the premises, the materials, supplies, articles, or equipment required under the contract and of the general character described by the specifications.

(2)(i) If the materials or supplies are purchased from a DBE regular dealer, count 60 percent of the cost of the materials or supplies toward DBE goals.

(ii) For purposes of this section, a regular dealer is a firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials, supplies, articles or equipment of the general character described by the specifications and required under the contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business.

(A) To be a regular dealer, the firm must be an established, regular business that engages, as its principal business and under its own name, in the purchase and sale or lease of the products in question.

(B) A person may be a regular dealer in such bulk items as petroleum products, steel, cement, gravel, stone, or asphalt without owning, operating, or maintaining a place of business as provided in this paragraph (e)(2)(ii) if the person both owns and operates distribution equipment for the products. Any supplementing of regular dealers' own distribution equipment shall be by a long-term lease agreement and not on an ad hoc or contract-by-contract basis.

(C) Packagers, brokers, manufacturers' representatives, or other persons who arrange or expedite transactions are not regular dealers within the meaning of this paragraph (e)(2).

(3) With respect to materials or supplies purchased from a DBE which is neither a manufacturer nor a regular dealer, count the entire amount of fees or commissions charged for assistance in the procurement of the materials and supplies, or fees or transportation charges for the delivery of materials or supplies required on a job site, toward DBE goals, provided you determine the fees to be reasonable and not excessive as compared with fees customarily allowed for similar services. Do not count any portion of the cost of the materials and supplies themselves toward DBE goals, however.

(f) If a firm is not currently certified as a DBE in accordance with the standards of subpart D of this part at the time of the execution of the contract, do not count the firm's participation toward any DBE goals, except as provided for in Sec. 26.87(i).

(g) Do not count the dollar value of work performed under a contract with a firm after it has ceased to be certified toward your overall goal.

(h) Do not count the participation of a DBE subcontractor toward the prime contractor's DBE achievements or your overall goal until the amount being counted toward the goal has been paid to the DBE.

Michigan Department
Of Transportation
2124A (05/12)

PRIME CONTRACTOR BI-WEEKLY STATEMENT OF SUBCONTRACTOR/SUPPLIER PAYMENTS

Portions of the information required in accordance with 49 CFR part 26.37 (as detailed in the prompt payment provisions to monitor the progress of the prime contractor in meeting contractual DBE obligations.)

SEE INSTRUCTIONS ON REVERSE

| | |
|------------------|-------------|
| PRIME CONTRACTOR | CONTRACT ID |
|------------------|-------------|

BI-WEEKLY PERIOD ENDING: _____ PROJECT COMPLETION

| SUBCONTRACTOR, DBE SUBCONTRACTOR, DBE TRUCKER, DBE SUPPLIER OR SERVICE PROVIDER | SERVICES/WORK CLASSIFICATION | TOTAL SUB CONTRACT AMOUNT | CUMULATIVE DOLLAR VALUE OF SERVICES COMPLETED | DEDUCTIONS | ACTUAL AMOUNT PAID TO DATE | DBE AUTHORIZED SIGNATURE AT PROJECT COMPLETION ONLY | DATE |
|--|---------------------------------|---------------------------------|--|------------|----------------------------------|--|------|
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As the authorized representative of the above prime contractor, I certify that all payments to non-DBE truckers, and non-DBE suppliers that have performed work or supplied materials to the prime during the reporting period have been made, and I state that to the best of my knowledge, this information is true and accurate.

| | | |
|---|-------|------|
| CONTRACTORS AUTHORIZED REPRESENTATIVE (Signature) | TITLE | DATE |
|---|-------|------|

FOR THE MICHIGAN DEPARTMENT OF TRANSPORTATION USE ONLY

COMMENTS

| | |
|---------------------------------------|------|
| RESIDENT/PROJECT ENGINEER (Signature) | DATE |
|---------------------------------------|------|



INSTRUCTIONS

PRIME CONTRACTOR or AUTHORIZED REPRESENTATIVE

This statement reports the actual dollar amounts of the project cost earned by and paid to all subcontractors, DBE subcontractors, DBE suppliers, and DBE truckers. Complete and submit to the Resident/Project Engineer on a bi-weekly basis during the course of the project using the MERS database. This submittal is required prior to release of the second and subsequent estimates per FUSP 109(A). A hard copy of this form must also be submitted 30 days after project completion with actual DBE signatures (not using MERS).

For “*Control Section*” and “*Job No.*” Use the numbers assigned by MDOT.

For “*Services/Work Classification*,” report services/work performed by DBE subcontractors, DBE suppliers, DBE truckers, and DBE consultants listed by work classification code. If they are performing work in more than one classification, report the code with the largest dollar value. A list of work classification codes is available at www.michigan.gov/mucp.

For “*Total Subcontract Amount*”, report total amount of the contract between the prime contractor and the subcontractor.

For “*Deductions*”, report deductions made by the prime contractor to the subcontractor’s “*Cumulative Dollar Value of Services Completed*” for bond or other fees, materials, services or equipment provided to the subcontractor according to mutual, prior agreement (documentation of such agreement may be required by MDOT).

For “*Actual Amount Paid to Date*”, report cumulative actual payments made to the subcontractor for services completed.

Provide “*DBE Authorized Signature*” on the project completion report.

Be sure to sign, title and date the project completion report.

MDOT RESIDENT/PROJECT ENGINEER:

Please complete the “*Comments*” area, date and submit within the MERS database within 7 days of receipt from prime. Please complete the “*Comments*” area, sign, date, and fax the **project completion report** only to 517-335-0945 or email to mdot-paymentstatements@michigan.gov within 7 days of receipt from prime.

MDOT Office of Business Development
P.O. Box 30050
Lansing, Michigan 48909
Questions about this form? Call Toll-free, 1866-DBE-1264

STATE ADMINISTRATIVE BOARD

RESOLUTION 2011-2

**PROCEDURES APPLICABLE TO MDOT CONTRACTS AND GRANTS
AND
RESCISSION OF RESOLUTIONS 2003-2 and 2005-2**

WHEREAS, the State Administrative Board ("Board") exercises general supervisory control over the functions and activities of all administrative departments, boards, commissioners, and officers of this State, and of all State institutions pursuant to Section 3 of 1921 PA 2, MCL 17.3;

WHEREAS, the Board may adopt rules governing its procedures and providing for the general conduct of its business and affairs pursuant to Section 2 of 1921 PA 2, MCL 17.2;

WHEREAS, exercising its power to adopt rules, the Board adopted Resolution 2003-1 on March 4, 2003, lowering the threshold for Board approval of all new contracts, grants and amendments to \$25,000 or more for the purchase of materials or services unless specifically approved by the Governor, and simultaneously adopted Resolution 2003-2 setting forth certain exceptions to Resolution 2003-1;

WHEREAS, the Board has adopted Resolution 2011-1, raising the threshold for Board approval of all new contracts and grants to \$250,000 or more and of all amendments to \$125,000 or more, and rescinding Resolution 2003-1;

WHEREAS, the Michigan Department of Transportation ("MDOT") is a party to a considerable number of contracts, the majority of which are funded via grants administered by federal agencies including the U.S. Department of Transportation's Federal Highway Administration, Federal Transit Administration, Federal Railroad Administration and Federal Aviation Administration, which oversee MDOT's administration of such contracts and amendments thereto;

WHEREAS, MDOT has implemented internal procedures to assure the proper expenditure of state and federal funds and is subject to financial and performance audits by the Office of Commission Audits pursuant to 1982 PA 438, MCL 247.667a;

WHEREAS, MDOT is a party to a significant number of contracts which by their nature involve substantial consideration and often require amendments arising out of changes in scope, differing field conditions and design errors and omissions;

WHEREAS, delays in the approval of amendments to contracts can result in: postponement of payments to subcontractors and suppliers; work slow downs and stoppages; delays in the completion of projects; exposure to additional costs; and exposure to litigation arising out of contractor claims; and

WHEREAS, recognizing the Board's duty to promote the efficiency of State Government, the Board resolves as follows:

1. Resolution 2003-2 is rescinded.
2. Resolution 2005-2 is rescinded.
3. A contract for professional design, engineering or consulting services requiring MDOT prequalification in connection with the construction or physical improvement of a street, road, highway, bridge, transit or rail system, airport or other structure congruous with transportation ("Professional Engineering Consultant Contract") or a contract for the construction or physical improvement of a street, road, highway, bridge, transit or rail system, airport or other structure congruous with transportation ("Construction Contract") must be approved by the Board prior to execution by MDOT if the amount of the contract is \$500,000 or more. MDOT may obtain approval of the solicitation of a Professional Engineering Consultant Contract or a Construction Contract which, based on the estimate prepared by an engineer employed by the State of Michigan, is estimated to be \$500,000 or more. A contract arising out of such solicitation must be approved by the Board prior to execution by MDOT if the amount of the contract exceeds 110% of the State engineer's estimate.
4. An amendment to a Professional Engineering Consultant Contract or a Construction Contract must be approved by the Board prior to execution by MDOT if the amount of the amendment and the sum of all previous amendments exceeds 10% of the original contract, except that an amendment to a Professional Engineering Consultant Contract or a Construction Contract need not be approved by the Board if: a) approved in accordance with applicable federal law or procedure by a representative of a federal agency contributing funds to the project that is the subject of the contract; or b) approved in accordance with MDOT's internal procedures provided the procedures include approval by at least one MDOT employee who has managerial responsibility and is neither the project manager nor directly involved in the administration of the project.
5. A contract for services not requiring MDOT prequalification ("Service Contract") in the amount of \$250,000 or more must be approved by the Board prior to execution by MDOT. A Service Contract does not include a Professional Engineering Consultant Contract or a Construction Contract.
6. An amendment to a Service Contract must be approved by the Board prior to execution by MDOT if the amount of the amendment and the sum of all previous amendments total \$125,000 or more. Thereafter, an amendment to a Service Contract must be approved by the Board if the amount of the amendment and the sum of all amendments executed after the most recent Board approval total \$125,000 or more.
7. A contract involving the conveyance of any real property interest under the jurisdiction of MDOT must be approved by the Board prior to execution by MDOT if the fair market value of the interest is \$250,000 or more. Fair market value must be determined in accordance with procedures approved by the State Transportation Commission.

8. MDOT may enter into a contract with a sub-recipient without approval of the Board if: a) the purpose of the contract is to provide federal or state matching funds for a project; b) MDOT has been authorized by an agency administering any federal funds to award them to the sub-recipient; and c) the sub-recipient has agreed to fully reimburse the State in the event the sub-recipient does not use the funds in accordance with the purpose of the funding. A sub-recipient includes, but is not limited to, a local unit of government, a governmental authority, a private non-profit entity, a railroad or a rail service provider.

9. MDOT may enter into a cost participation contract with a local unit of government without approval of the Board if: a) the contract involves the construction or physical improvement of a street, road, highway, bridge or other structure congruous with transportation; b) the construction or improvement is funded by federal, state or local funds; and c) the contract is approved by each entity providing funds or in accordance with applicable law.

10. MDOT may enter into a contract in connection with the award of a grant, including state matching funds, to a local unit of government, a governmental authority, a private non-profit entity, a railroad or a rail service provider, without approval of the Board if the contract provides that the recipient will fully reimburse the State in the event grant funds are not used in accordance with the terms of the grant.

11. MDOT may enter into a contract with an airport sponsor without approval of the Board if the contract has been approved by the Michigan Aeronautics Commission.

12. MDOT may enter into a contract or award a grant without approval of the Board in situations where emergency action is required. For all emergency contracts or grants of \$250,000 or more, MDOT must transmit to the Board a written report setting forth the nature of the emergency and the key terms of the contract or grant within 30 days of executing the contract or awarding the grant.

13. Notwithstanding any provision of this resolution, the Board may require MDOT to report the status of any project and may require MDOT to obtain Board approval of any contract, grant or any amendment to a contract.

This Resolution is effective _____, 2011.


APPROVED
State
Administrative Board

8/30/11 *Loe M. Cousin*

*****DFCC: OF INSURANCE FOR CONSTRUCTION AND RECONSTRUCTION OF MICHIGAN DEPARTMENT OF TRANSPORTATION HIGHWAY/AERONAUTICS PROJECTS

Clear Form

Information required by the Federal specifications for Highway construction and/or Act 327, P.A. of 1945 to verify insurance.

INSTRUCTIONS: Complete and return  to the address on the back of this form.

The subscribing insurance company certifies that insurance of the types and for limits of liability covering the work under contract with MDOT or airport owner has been obtained by the contractor named below.

Such insurance, here certified, is written in accordance with the company's regular policies and endorsements subject to the company's applicable manuals of rules and rates, except (1) the insurance shall not be subject to the usual "x" - explosion, "c" - collapse or "u" - underground property damage exclusions.



| | | | |
|-----------------|---------|-------|----------|
| NAME OF INSURED | | | |
| ADDRESS | CITY | STATE | ZIP CODE |
| TELEPHONE NO. | FAX NO. | | |

| TYPE OF INSURANCE | POLICY NUMBER & NAME OF INSURANCE COMPANY (If more than one) | POLICY DATES (MM/DD/YY) | | LIMITS: Each Occurrence: \$1,000,000 Aggregate: \$2,000,000 BODILY INJURY AND PROPERTY DAMAGE LIABILITY | |
|--|--|-------------------------|------------|---|--------------------------|
| | | EFFECTIVE | EXPIRATION | | |
| <input type="checkbox"/> General Liability | | | | General Aggregate | \$ |
| <input type="checkbox"/> Commercial General Liability | | | | Prods. comp/ops Aggregate | \$ |
| <input type="checkbox"/> Claims Made <input type="checkbox"/> Occurrence | | | | Personal & Advertising Inj. | \$ |
| <input type="checkbox"/> \$_____ P.D. Deductible | | | | Each Occurrence | \$ |
| <input type="checkbox"/> XCU Exclusion | | | | Fire Damage (any one fire) | \$ |
| <input type="checkbox"/> Contractual Exclusion | | | | Medical Exp. (any one person) | \$ |
| AUTOMOTIVE LIABILITY | | | | | |
| <input type="checkbox"/> Any Auto | | | | Combined Single Limit (Minimum \$2,000,000.00) | \$ |
| <input type="checkbox"/> All Owned Autos | | | | Bodily Injury (per person) (Minimum \$500,000.00) | \$ |
| <input type="checkbox"/> Scheduled Autos | | | | Bodily Injury (per accident) (Minimum \$1,000,000.00) | \$ |
| <input type="checkbox"/> Hired Autos | | | | Property Damage (Minimum \$1,000,000.00) | \$ |
| <input type="checkbox"/> Non-Owned Autos | | | | | |
| <input type="checkbox"/> Garage Liability | | | | | |
| <input type="checkbox"/> Umbrella | | | | Each Occurrence | \$ |
| | | | | Aggregate | \$ |
| <input type="checkbox"/> Excess Liability Other Than Umbrella | | | | Each Occurrence | \$ |
| | | | | Aggregate | \$ |
| WORKERS COMPENSATION AND EMPLOYERS LIABILITY | | | | STATUTORY | |
| | | | | \$ | (Each Accident) |
| | | | | \$ | (Disease - Policy Limit) |
| | | | | \$ | (Disease - Each Empl.) |
| <input type="checkbox"/> Other | | | | | |

| | | | |
|----------------|--|-------|----------|
| NAME OF AGENCY | NAME OF INSURANCE COMPANY (If only one for all policies) | | |
| ADDRESS | CITY | STATE | ZIP CODE |
| TELEPHONE NO. | FAX NO. | | |

| | |
|--|------|
| AUTHORIZED REPRESENTATIVE SIGNATURE (Required) | DATE |
|--|------|

ALLEGAN COUNTY ROAD COMMISSION

PROGRESS CLAUSE

1 of 1

Wightman & Associates, Inc./AJN

01/24/2014

Start work within ten (10) days after receiving notice of award of contract or on or before the date designated as the starting date in the Detailed Progress Schedule, whichever is later. In no case shall any work be commenced prior to receipt of formal notice of award by the Department.

The project shall be open to traffic no later than October 15, 2014 including permanent signing and pavement markings. The entire project shall be fully completed by October 31, 2014.

The approved low bidder(s) for the work covered by this proposal will be required to participate in a pre-construction meeting with MDOT, the Allegan County Road Commission, and/or representatives to work out a Detailed Progress Schedule. The schedule for this meeting will be set within one week after the low bidder is determined.

The named subcontractor(s) for Specialty and/or Designated Items (if such items are designated in the proposal) which materially affect the work schedule, shall also be present at the scheduled meeting and they will be required to sign the Progress Schedule to indicate their approval of the scheduled dates of work set forth in the Progress Schedule.

The Project Engineer will arrange the time and place for the meeting.

The Progress Schedule shall include, as a minimum, the controlling work items for the completion of the project and the planned dates (or work day for a work day project) that these work items will be controlling operations. When specified in the bidding proposal, the date the project is to be opened to traffic as well as the final project completion date shall also be included in the Detailed Progress Schedule.

If the Bidding Proposal specifies other controlling dates, these shall also be included in the Progress Schedule.

ALLEGAN COUNTY ROAD COMMISSION

SPECIAL PROVISION

FOR

TRAFFIC MAINTENANCE AND CONTROL

1 of 5

Wightman & Associates, Inc./AJN

01/24/2014

- a. Description.** This work shall consist of work on Division Street in Dorr and Leighton Townships, Allegan County.
- b. General.** Traffic shall be maintained according to Sections 104.11, 812 and 922 of the Michigan Department of Transportation *2012 Standard Specifications for Construction*, the Michigan Manual of Uniform Traffic Control Devices (MMUTCD), and any Supplemental Specifications, and as herein specified.
1. The Contractor shall notify the Engineer, local police department, local fire department, and other emergency response units a minimum of **72 business hours** prior to the implementation of any detours, road closures, lane closures and major traffic shifts.
 2. The Contractor shall coordinate his operations with Contractors performing work on other projects within or adjacent to the Construction Influence Area (CIA) as described below. The Contractor shall note Section 104.08 of the MDOT Standard Specifications for Construction for the requirement of cooperation with other contractors.
 3. Michigan Department of Transportation, County and/or Local maintenance crews and/or Contract Maintenance Agencies may perform maintenance work within or adjacent to the Construction Influence Area (CIA). The Maintenance Division of Michigan Department of Transportation and/or Contract Maintenance Agency will coordinate their operations with the Resident Engineer to minimize the interference to the Contractor. No additional payment will be made to the Contractor for the joint use of the traffic control items.
 4. During all times of construction, access to all business and residential drives for emergency vehicles, employees, customers and local residents shall be maintained by the Contractor until the project is completed, unless closure is approved by the Engineer. This work will not be paid for separately, but shall be included in payment for Minor Traf Devices.
 5. Open excavations and/or trenches will not be allowed overnight unless approved by the Engineer. The Contractor shall use a trench box and backfill all excavations and/or trenching and cover or protect the trench box at the end of each work day. Protection shall include as a minimum pedestrian fencing as required. At utility trenches across streets and drives, traffic shall be maintained by the use of existing or salvaged materials. Payment is included in Minor Traf Devices.
 6. Several of the commercial businesses have supplied the Allegan County Road Commission with expected traffic volumes and types that could occur during the construction. This is shown below for informational purposes only and may change on a daily and/or weekly basis. This does not release the Contractor from coordinating and communicating driveway work with the commercial businesses. Contractor shall coordinate work at all driveways whether they are identified below or not.

4652 Division and 4655 Division: Daily UPS, Fedex, and LTL Freight inbound and outbound shipments. Volume is fairly consistent.

Classic Transport located (4729 Division) has approximately 100 trucks/day, 7 days a week. Special coordination will be required during the replacement of the southerly truck entrance (concrete approach) due to high truck traffic.

West Michigan Auto Auction (4758 Division) conducts auctions on Fridays from 7 am – 7 pm. Deliveries daily. Driveway work should be scheduled around the Friday auctions.

Stampede Die (1142/1143 Electric Avenue) expects approximately 20-30 trucks/day with irregular wide-load deliveries (3-4 times/month). Owner directed to coordinate wide load deliveries with Contractor.

Altra Products (4799 Division) has daily deliveries, which typically come from the north.

c. Construction Influence Area (CIA). The CIA shall include the right-of-way of the following roadways, within the approximate limits described below:

1. Division Street from 1000' south of the P.O.B. to 1000' north of the P.O.E.
2. In addition, the CIA shall include the rights-of-way of any intersecting roads adjacent to the work zone for a distance of approximately 1000 feet in advance of Division Street. The roads include:

146th Avenue, 147th Avenue, and Electric Avenue.

d. Traffic Restrictions.

1. No work shall be performed during the Memorial Day, 4th of July and Labor Day holiday periods, as defined by the Engineer.
2. Work shall only be performed between the hours of 7am to 7pm (Monday – Friday). Work outside of these posted times will be at the discretion of the Engineer and any additional cost for maintaining traffic shall be borne by the Contractor.
3. No work shall be performed on Saturday or Sunday, unless approved by the Engineer in writing. Contractor shall request permission to work no later than 12:00 (noon) the Wednesday prior to the weekend he is requesting to work.
4. Flag control shall be used as directed by the Engineer for cross street traffic and driveways while paving.
5. The arrow panel, signs, and channelizing taper for any flag control operation shall be placed at locations approved by the Engineer for adequate visibility to oncoming traffic.
6. The minimum lane width throughout the CIA shall be 10 foot.

e. Stage Construction. The traffic control required by this Special Provision for work on Division Street and adjacent roadways is based upon lane closures and road closures as shown in the plans. An alternate traffic control plan may be used by the contractor, subject to review and approval by the Engineer. The anticipated staging is listed below.

Stage 1: Includes the reconstruction of Division Street from the P.O.B. to Sta 30+85, including the intersection and approaches of 146th Avenue; reconstruction of Division Street from Sta 67+50 to the P.O.E., including the Electric Avenue Intersection and removal and replacement of the box culvert and all cross culverts. Work shall include: removal of pavement and concrete surfaces; culvert replacement; sand subbase, aggregate base; HMA cold milling as necessary; roadway grading; HMA base and levelling; driveway approaches; and slope restoration. This work shall be completed by utilizing a complete road closure with a detour as detailed on plan sheet .130463-15. Stage 1 shall be completed within eight (8) weeks from the start of construction.

Contractor will be required to maintain local traffic as necessary to provide access for residents and businesses within the stage limits.

Stage 2: Is for the widening of Division Street (east or west side) from Sta 30+85 to Sta 67+50. Work shall include: removal of pavement and concrete surfaces, part width; HMA cold milling, part width; roadway grading, part width; trenching; sand subbase; aggregate base; HMA base and levelling; driveway approaches, including curb and gutter; drive culverts and storm sewer work; and slope restoration. This work shall be completed using a detour for north bound traffic and maintain at least one-lane for south bound traffic as detailed on sheet 130463-16. Contractor will be required to provide access for residents and businesses within the stage limits.

Stage 3: Is for the widening of Division Street (opposite side from Stage 2) from Sta 30+85 to Sta 67+50. Work shall include all items as designated in Stage 2. This work shall be completed using a detour for north bound traffic and maintain at least one-lane for south bound traffic as detailed on sheet 130463-16. Contractor will be required to provide access for residents and businesses within the stage limits.

Stage 4: Is for the placing of the HMA Top Course (P.O.B. to P.O.E.), permanent pavement markings, miscellaneous items, and project cleanup. This work shall be completed using a detour for north bound traffic and maintain at least one-lane for south bound traffic as detailed on sheet 130463-16. Contractor will be required to provide access for residents and businesses within the stage limits.

f. Traffic Control Devices.

1. General

- A. All traffic control devices and their usage shall conform to the Michigan Manual of Uniform Traffic Control Devices (MMUTCD), current edition, and as specified herein.
- B. During non-working periods, any work site with uncompleted work shall have advance signs (W21-4 – “Road Work Ahead”) and Plastic Drums, at specific locations, as directed by the Engineer, at no additional cost to the Allegan County Road Commission.
- C. During construction, access to all business and residential drives shall be maintained.
- D. Temporary warning, regulatory and guide signs not applicable to the current traffic operation or lane closure shall be removed, covered, or laid down with the legs removed as directed by the Project Engineer.
- E. All traffic control devices damage by construction activities shall be replaced at the Contractor’s expense.

- F. The Contractor shall completely cover all conflicting warning, regulatory, and guide signs located within the CIA in accordance with the MDOT Standard Specifications for Construction, to be paid for as Sign Cover.

2. Temporary Signs

- A. Fabrication, installation, and removal of temporary signs shall be the responsibility of the Contractor and shall be included in the pay items for **Sign, Type __, Temp, Furn.**
- B. All diamond-shaped warning signs shall be 48in x 48in mounted at a 5 foot minimum bottom height in uncurbed areas, and 7 foot minimum bottom height in curbed or pedestrian areas.
- C. Distances shown between construction warning, regulatory and guide signs shown on the Michigan Department of Transportation Maintaining Traffic Typical M0020 are approximate and may require field adjustment, as directed by the Engineer.
- D. All temporary signs shall be constructed with legends and symbols flush to the signs face and not extending beyond the sign borders or edges.
- E. 4 "SPEED LIMIT 45 MPH" (R2-1) signs are included in the quantities to be placed at locations designated by the Engineer.
- F. All temporary signs that will be in place for more than 14 Days shall be mounted on ground driven sign supports per Michigan Department of Transportation Maintaining Traffic Typical WZD-100-A, unless approved by Engineer to leave on stands. The cost to maintain signs whether driven on posts or sandbagged will be included in payment for **Sign, Type __, Temp, Oper.**
- G. Any additional signs required for maintaining traffic shall be approved by the Engineer prior to placement and shall be paid for at the contract unit prices.

3. Channelizing Devices

- A. Channelizing devices required shall be **Plastic Drum, High Intensity, Furn** and be in conformance with the Michigan Department of Transportation Maintaining Traffic Typical WZD-125-E.
- B. Plastic Cones may be used as channelizing devices only during daylight hours. If plastic cones are used, they shall be a minimum of 28" in height and placed as directed by the ENGINEER.
- C. **150 Plastic Drum, High Intensity, __** are included to be used at the discretion of the Engineer. Any additional channelizing devices needed for construction shall be approved by the Engineer prior to delivery and placement.
- D. **Barricade, Type III, High Intensity, Double Sided, Furn** shall have high intensity sheeting on both sides of the rail and shall be 8 feet in length unless otherwise specified. All type III barricades shall be in conformance with Michigan Department of Transportation Maintaining Traffic Typical WZD-125-E.

4. Lighted Arrows

- A. **Lighted Arrow, Type C, Oper** shall be used whenever closing a traffic lane or shoulder and as called for on the traffic typical plans.

5. Temporary Pavement Markings

- A. Temporary pavement markings shall consist of:

Pavt Mrkg, Type NR, Tape, 4 inch, Yellow, Temp
Pavt Mrkg, Type R, 4 inch, Yellow, Temp
Pavt Mrkg, Type R, 4 inch, White, Temp

- B. **Pavt Mrkg, Type R, _ inch, _, Temp** shall be placed on existing pavement areas that will remain after construction and on new pavement for interim traffic control at located specified by the Engineer.
- C. **Pavt Mrkg, Type NR, Tape, _ inch, _, Temp** shall be placed on pavement areas that will be removed or covered during construction for interim traffic control at locations specified by the Engineer.
- D. Quantities for temporary markings are based upon skip yellow lane markings through the entire limits of the project.

5. Permanent Pavement Markings

- A. Permanent pavement markings shall consist of the following:

Pavt Mrkg, Modified Urethane, 4 inch, Yellow for center lane lines
Pavt Mrkg, Waterborne, 4 inch, White for edge lines and lane lines

- B. All permanent pavement markings shall be in place prior to reopening the road to traffic.
- C. All markings, shapes and dimensions shall conform to the MDOT pavement marking typical, unless specified otherwise by the plans or a Special Provision.

g. Dust Control. Per Section 107.15.A.1. of the Michigan Department of Transportation 2012 Standard Specifications for Construction, Contractor shall maintain dust control on this project throughout the construction schedule.

Sand Subbase: Contractor shall apply water to the sand grade as necessary to reduce the dust on the project, or as directed by the Engineer. The Contractor shall apply water utilizing equipment that evenly distributes the water across the grade. This work will not be paid for separately, but shall be included in payment for **Minor Traf Devices**.

h. Measurement and Payment. The estimate of quantities for maintaining traffic on this project are based on the signing and related traffic control devices described in this Special Provision and payment for these devices shall be according to Section 8012.04 of the MDOT *2012 Standard Specifications for Construction* unless otherwise specified.

MINIMUM MERGING TAPER LENGTH "L" (FEET)

| OFFSET FEET | POSTED SPEED LIMIT, MPH (PRIOR TO WORK AREA) | | | | | | | | | |
|----------------|--|-----|-----|-----|-----|-----|-----|-----|-----|------|
| | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 |
| 1 | 10 | 15 | 20 | 27 | 45 | 50 | 55 | 60 | 65 | 70 |
| 2 | 21 | 30 | 41 | 53 | 90 | 100 | 110 | 120 | 130 | 140 |
| 3 | 31 | 45 | 61 | 80 | 135 | 150 | 165 | 180 | 195 | 210 |
| 4 | 42 | 60 | 82 | 107 | 180 | 200 | 220 | 240 | 260 | 280 |
| 5 | 52 | 75 | 102 | 133 | 225 | 250 | 275 | 300 | 325 | 350 |
| 6 | 63 | 90 | 123 | 160 | 270 | 300 | 330 | 360 | 390 | 420 |
| 7 | 73 | 105 | 143 | 187 | 315 | 350 | 385 | 420 | 455 | 490 |
| 8 | 83 | 120 | 163 | 213 | 360 | 400 | 440 | 480 | 520 | 560 |
| 9 | 94 | 135 | 184 | 240 | 405 | 450 | 495 | 540 | 585 | 630 |
| 10 | 104 | 150 | 204 | 267 | 450 | 500 | 550 | 600 | 650 | 700 |
| 11 | 115 | 165 | 225 | 293 | 495 | 550 | 605 | 660 | 715 | 770 |
| 12 | 125 | 180 | 245 | 320 | 540 | 600 | 660 | 720 | 780 | 840 |
| 13 | 135 | 195 | 266 | 347 | 585 | 650 | 715 | 780 | 845 | 910 |
| 14 | 146 | 210 | 286 | 374 | 630 | 700 | 770 | 840 | 910 | 980 |
| 15 | 157 | 225 | 307 | 400 | 675 | 750 | 825 | 900 | 975 | 1050 |

TAPER LENGTH "L" IN FEET

THE FORMULAS FOR THE MINIMUM LENGTH OF A MERGING TAPER IN DERIVING THE "L" VALUES SHOWN IN THE ABOVE TABLES ARE AS FOLLOWS:

"L" = $\frac{W \times S^2}{60}$ WHERE POSTED SPEED PRIOR TO THE WORK AREA IS 40 MPH OR LESS

"L" = S x W WHERE POSTED SPEED PRIOR TO THE WORK AREA IS 45 MPH OR GREATER

- L = MINIMUM LENGTH OF MERGING TAPER
- S = POSTED SPEED LIMIT IN MPH PRIOR TO WORK AREA
- W = WIDTH OF OFFSET

TYPES OF TAPERS


UPSTREAM TAPERS

- MERGING TAPER
- SHIFTING TAPER
- SHOULDER TAPER
- TWO-WAY TRAFFIC TAPER

DOWNSTREAM TAPERS (USE IS OPTIONAL)

TAPER LENGTH

- L - MINIMUM
- 1/2 L - MINIMUM
- 1/3 L - MINIMUM
- 100' - MAXIMUM
- 100' - MINIMUM (PER LANE)

| | | | |
|---|------------------------------------|-----------|------------|
|  TRAFFIC AND SAFETY MAINTAINING TRAFFIC TYPICAL | TABLES FOR "L", "D" AND "B" VALUES | | |
| | DRAWN BY: CON:AE:djf | JUNE 2006 | M0020a |
| CHECKED BY: BMM | PLAN DATE: | 1 OF 2 | |
| FILE: K:/DGN/TSR/STDS/ENGLISH/MNTTRF/M0020a.dgn | | REV. | 08/21/2006 |

DISTANCE BETWEEN TRAFFIC CONTROL DEVICES "D"
AND LENGTH OF LONGITUDINAL BUFFER SPACE ON
"WHERE WORKERS PRESENT" SEQUENCES


| "D" DISTANCES | POSTED SPEED LIMIT, MPH (PRIOR TO WORK AREA) | | | | | | | | | |
|------------------|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 |
| D (FEET) | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 |

GUIDELINES FOR LENGTH OF
LONGITUDINAL BUFFER SPACE "B"

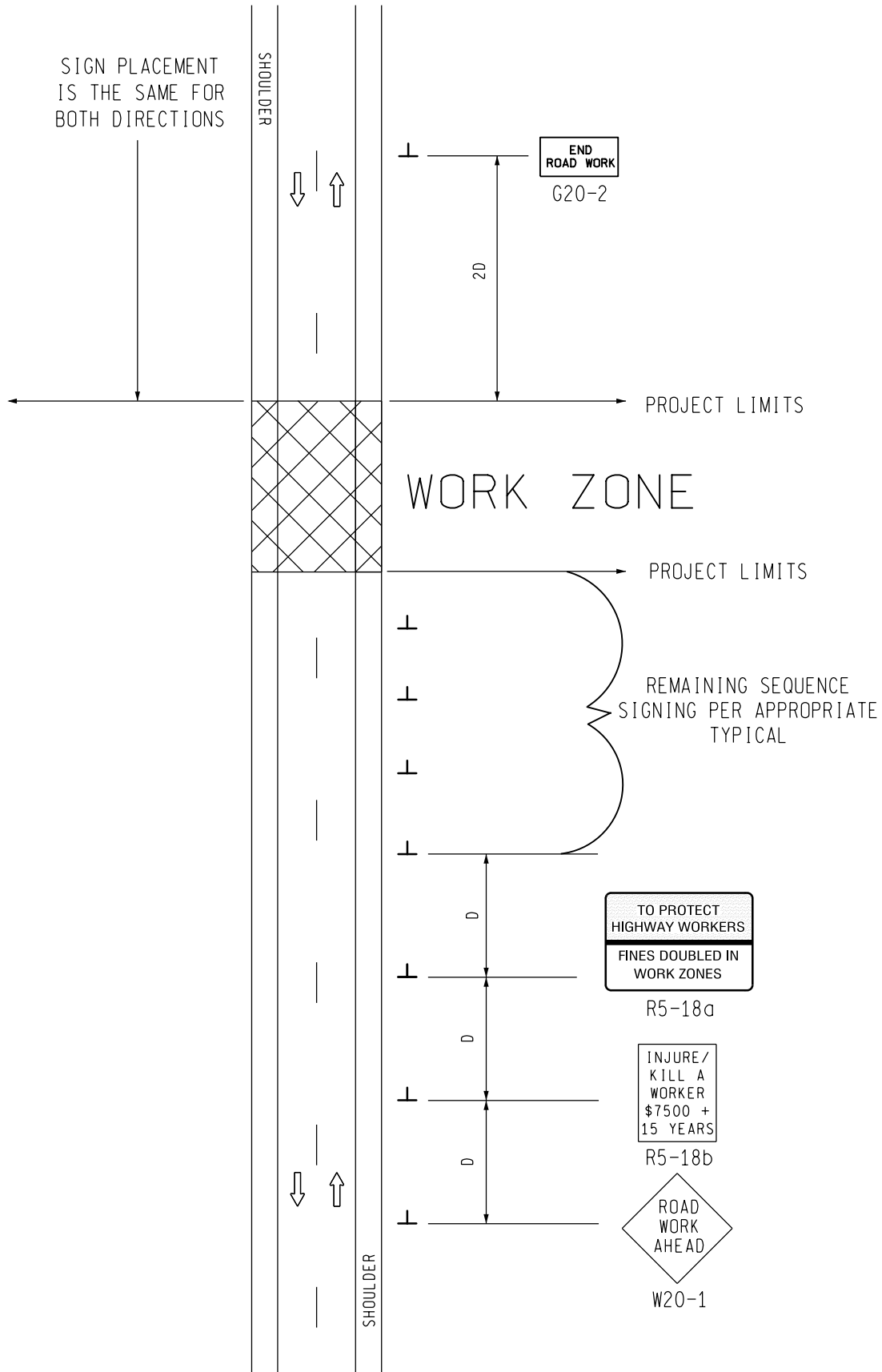
| SPEED* MPH | LENGTH FEET |
|---------------|----------------|
| 20 | 33 |
| 25 | 50 |
| 30 | 83 |
| 35 | 132 |
| 40 | 181 |
| 45 | 230 |
| 50 | 279 |
| 55 | 329 |
| 60 | 411 |
| 65 | 476 |
| 70 | 542 |

* POSTED SPEED, OFF PEAK 85TH PERCENTILE SPEED PRIOR TO WORK STARTING, OR THE ANTICIPATED OPERATING SPEED

1 BASED UPON AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) BRAKING DISTANCE PORTION OF STOPPING SIGHT DISTANCE FOR WET AND LEVEL PAVEMENTS (A POLICY ON GEOMETRIC DESIGN OF HIGHWAY AND STREETS), AASHTO. THIS AASHTO DOCUMENT ALSO RECOMMENDS ADJUSTMENTS FOR THE EFFECT OF GRADE ON STOPPING AND VARIATION FOR TRUCKS.

| | | | |
|---|---|-------------------------|--------|
|  TRAFFIC AND SAFETY MAINTAINING TRAFFIC TYPICAL | TABLES FOR "L", "D" AND "B" VALUES | | |
| | DRAWN BY: CON:AE:djf CHECKED BY: BMM | JUNE 2006 PLAN DATE: | M0020a |
| FILE: K:/DGN/TSR/STDS/ENGLISH/MNTTRF/M0020a.dgn REV. 08/21/2006 | | | |

SIGN PLACEMENT IS THE SAME FOR BOTH DIRECTIONS



SIGN = 68 f+2 - TYPE B
 FOR ONE DIRECTION OF TRAFFIC
 W20-1 QUANTITY INCLUDED
 WITH APPROPRIATE TYPICAL
 FOR SEQUENCE SIGNING

MDOT
 Michigan Department of Transportation
 TRAFFIC AND SAFETY
 MAINTAINING TRAFFIC
 TYPICAL

TYPICAL ADVANCE SIGNING TREATMENT FOR LONG, INTERMEDIATE AND SHORT TERM STATIONARY WORK ZONE OPERATIONS OF LESS THAN TWO MILES IN LENGTH WHERE TRAFFIC CONTROL DEVICES MAY REMAIN AT END OF WORK DAY ON AN UNDIVIDED TWO-WAY ROADWAY

DRAWN BY: CON:AE:djf
 CHECKED BY: BMM:CRB

OCTOBER 2011
 PLAN DATE:

M0040a

SHEET
 1 OF 2


NOT TO SCALE

NOTES

- 30. THE APPROPRIATE ADVANCE SIGNING SEQUENCE(S), (M0030a THROUGH M0080a) SHALL BE USED ON ALL PROJECTS.
- 32. THESE SIGNS SHALL BE LEFT IN PLACE AT THEIR PRESCRIBED LOCATIONS FOR THE DURATION OF THE PROJECT AND UNTIL ALL TEMPORARY TRAFFIC CONTROL HAS BEEN REMOVED.
- 35. THESE SIGNS ARE INTENDED TO BE USED WITHIN THE LIMITS OF THE TEMPORARY SEQUENCE SIGNING AS IS SHOWN ON 1 OF 2. THESE SIGNS ARE NOT TO BE INTERMINGLED WITH ANY OTHER TEMPORARY SEQUENCE SIGNING EXCEPT AS SHOWN.

SIGN SIZES

| | | |
|--------|---|-----------|
| G20-2 | - | 48" x 24" |
| R5-18a | - | 96" x 60" |
| R5-18b | - | 48" x 60" |
| W20-1 | - | 48" x 48" |

| | | |
|---|--|-----------------|
|  TRAFFIC AND SAFETY MAINTAINING TRAFFIC TYPICAL | TYPICAL ADVANCE SIGNING TREATMENT FOR LONG, INTERMEDIATE AND SHORT TERM STATIONARY WORK ZONE OPERATIONS OF LESS THAN TWO MILES IN LENGTH WHERE TRAFFIC CONTROL DEVICES MAY REMAIN AT END OF WORK DAY ON AN UNDIVIDED TWO-WAY ROADWAY | |
| | DRAWN BY: CON:AE:djf | OCTOBER 2011 |
| CHECKED BY: BMM:CRB | PLAN DATE: | M0040a |
| FILE: PW RD/TS/Typicals/Signs/MT NON FWY/M0040a.dgn | | REV. 10/13/2011 |

NOT TO SCALE

SIGN MATERIAL SELECTION TABLE

| SIGN SIZE | SIGN MATERIAL TYPE | | |
|--------------------------|--------------------|---------|----------|
| | TYPE I | TYPE II | TYPE III |
| ≤ 36" X 36" | | X | X |
| >36" X 36" ≤ 96" TO WIDE | | X | |
| > 96" WIDE TO 144" WIDE | X | X | |
| > 144" WIDE | X | | |

TYPE I ALUMINUM EXTRUSION
 TYPE II PLYWOOD
 TYPE III ALUMINUM SHEET

ROUNDING OF CORNERS IS NOT REQUIRED FOR TYPE I OR II SIGNS.
 VERTICAL JOINTS ARE NOT PERMITTED.
 HORIZONTAL JOINTS THROUGH SIGN LEGEND OR SYMBOLS ARE NOT PERMITTED.


POST SIZE REQUIREMENTS TABLE

| SIGN AREA (ft ²) | POST TYPE | | |
|---------------------------------|-----------------|----------------------|--------------|
| | U-CHANNEL STEEL | SQUARE TUBULAR STEEL | WOOD |
| ≤9 | 1 - 3 lb/ft* | 1 - 2" 12 or 14 GA* | N/A |
| 9 ≤ 20 | 2 - 3 lb/ft | 2 - 2" 12 or 14 GA | 1 - 4" X 6"* |
| > 20 ≤ 30 | N/A | N/A | 2 - 4" X 6" |
| > 30 ≤ 60 | N/A | N/A | 2 - 6" X 8" |
| > 60 ≤ 84 | N/A | N/A | 3 - 6" X 8" |

*SIGNS 4 FEET AND GREATER IN WIDTH REQUIRE 2 POSTS.
 SIGNS GREATER THAN 8 FEET IN WIDTH REQUIRE 2 OR 3 WOOD
 POSTS DEPENDING ON AREA OF SIGN.
 A MAXIMUM OF 2 POSTS WITHIN A 7' PATH IS PERMITTED.

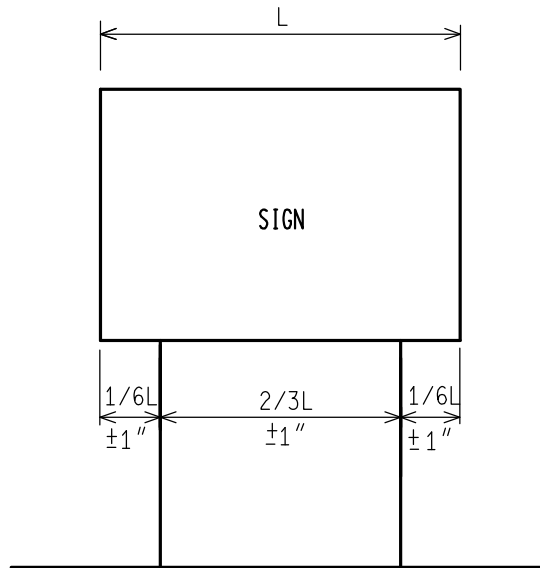
NOT TO SCALE

File:PW/Doc/RD/T&S/Typ/Dev/Sign MainTraf D/WZD-100-A Rev. 8/21/06 ECH

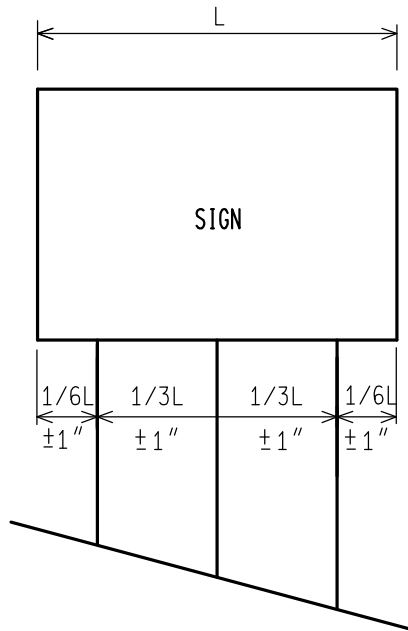
| | | | | |
|---|---|--|------------------|--|
|  Michigan Department of Transportation PREPARED BY TRAFFIC AND SAFETY SUPPORT AREA DRAWN BY: CON/ECH CHECKED BY: AUG | _____ ENGINEER OF DELIVERY _____ ENGINEER OF DEVELOPMENT PENDING _____ FHWA APPROVAL DATE | MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAYS DELIVERY STANDARD PLAN FOR GROUND DRIVEN SIGN SUPPORTS FOR TEMP SIGNS | | |
| | 8/2006 | WZD-100-A | SHEET 1 of 11 | |
| | PLAN DATE | | | |

NOTE: THE ORIGINAL SIGNED COPY IS KEPT ON FILE AT THE MICHIGAN DEPARTMENT OF TRANSPORTATION.

2 POST SIGN SUPPORT SPACING



3 POST SIGN SUPPORT SPACING

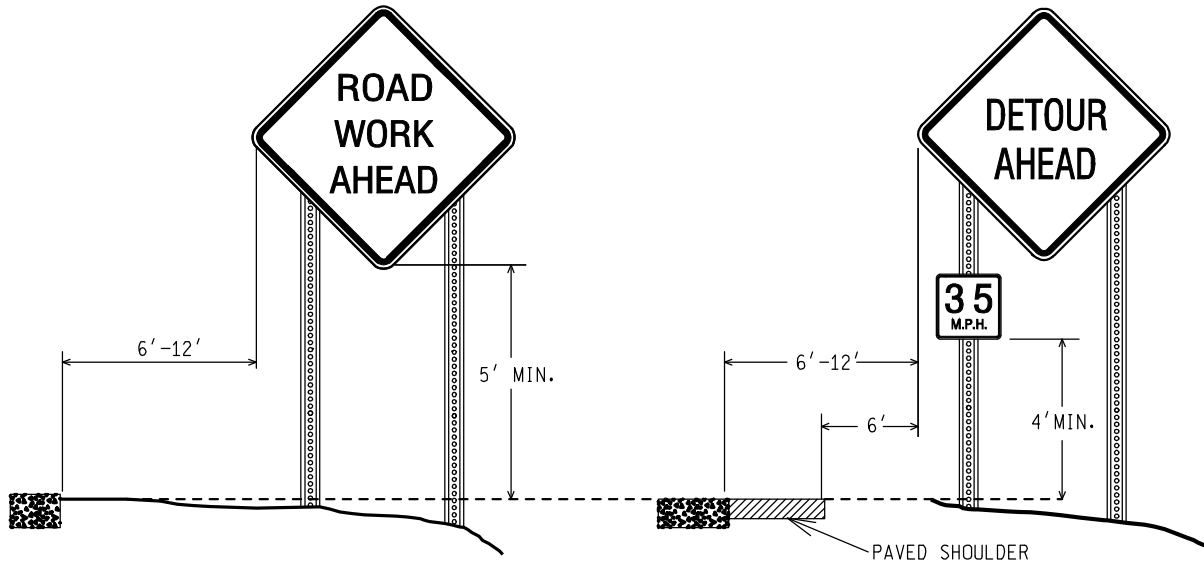


* FOR ALL 11' AND 12' LONG SIGNS ON 3 WOOD SUPPORTS, SPREAD POSTS SO AS TO HAVE A 8' MIN. TO 9' MAX. DISTANCE BETWEEN OUTSIDE POSTS.

NOT TO SCALE

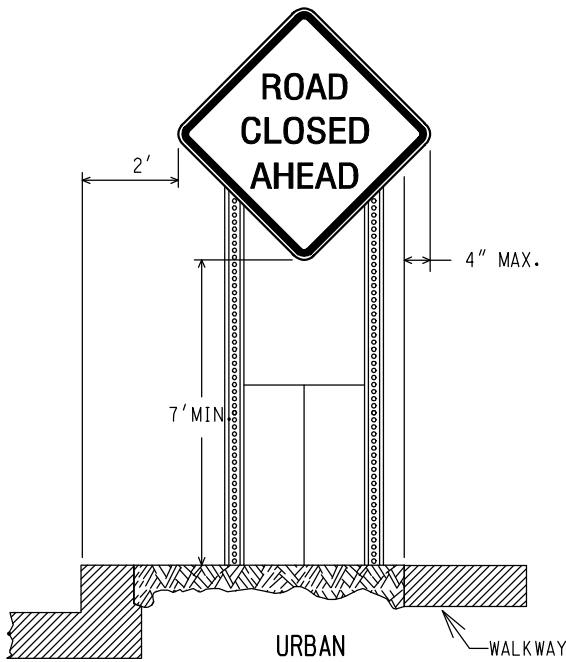
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|--|-------------------------------|---------------------|---------------------------------------|------------------|
| MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAYS DELIVERY STANDARD PLAN | PENDING FHWA APPROVAL DATE | 8/2006 PLAN DATE | <h3 style="margin: 0;">WZD-100-A</h3> | SHEET 2 of 11 |
| File: PW/Doc/RD/T&S/Typ/Dev/Sign MainTraf D/WZD-100-A Rev. 8/21/06 ECH | | | | |

NOTE: THE ORIGINAL SIGNED COPY IS KEPT ON FILE AT THE MICHIGAN DEPARTMENT OF TRANSPORTATION.



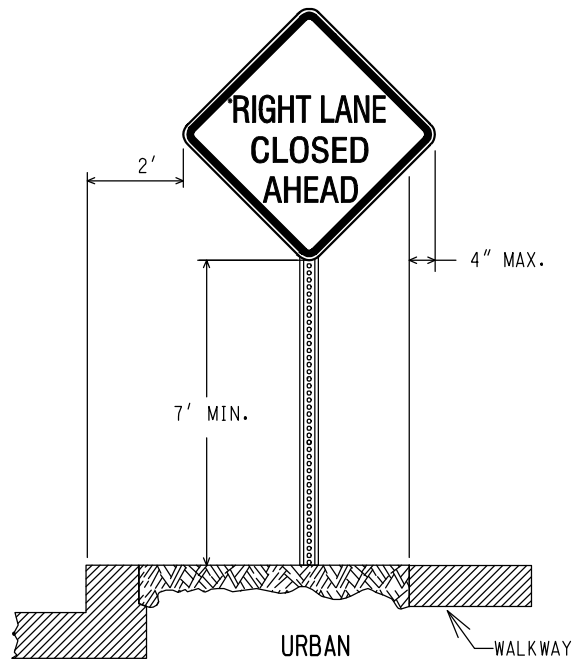
RURAL

RURAL WITH ADVISORY SPEED PLATE



URBAN

WALKWAY



URBAN

WALKWAY

(CURBED AREAS OR WHERE WALKWAYS ARE PRESENT)

(CURBED AREAS OR WHERE WALKWAYS ARE PRESENT)

BOTTOM HEIGHT AND OFFSET

NOT TO SCALE

MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS DELIVERY STANDARD PLAN

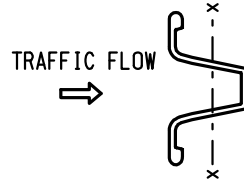
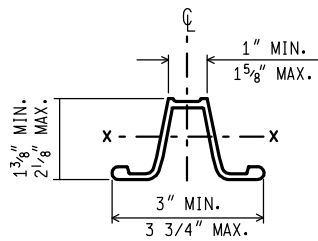
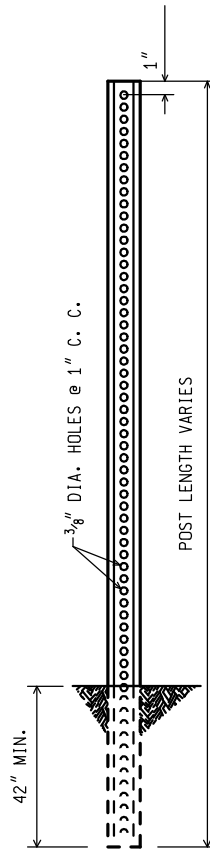
PENDING
FHWA APPROVAL DATE

8/2006
PLAN DATE

WZD-100-A

SHEET
3 of 11

NOTE: THE ORIGINAL SIGNED COPY IS KEPT ON FILE AT THE MICHIGAN DEPARTMENT OF TRANSPORTATION.



WEIGHT = 3 lbs/ft
 SECT. MOD. X.-X. = 0.31 CUBIC INCHES MIN.

3 lb. U - CHANNEL STEEL POST (NO SPLICE)

MOUNT SIGN ON OPEN FACE OF
 U - CHANNEL STEEL POST

NOT TO SCALE

MICHIGAN DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS DELIVERY STANDARD PLAN

PENDING
 FHWA APPROVAL DATE

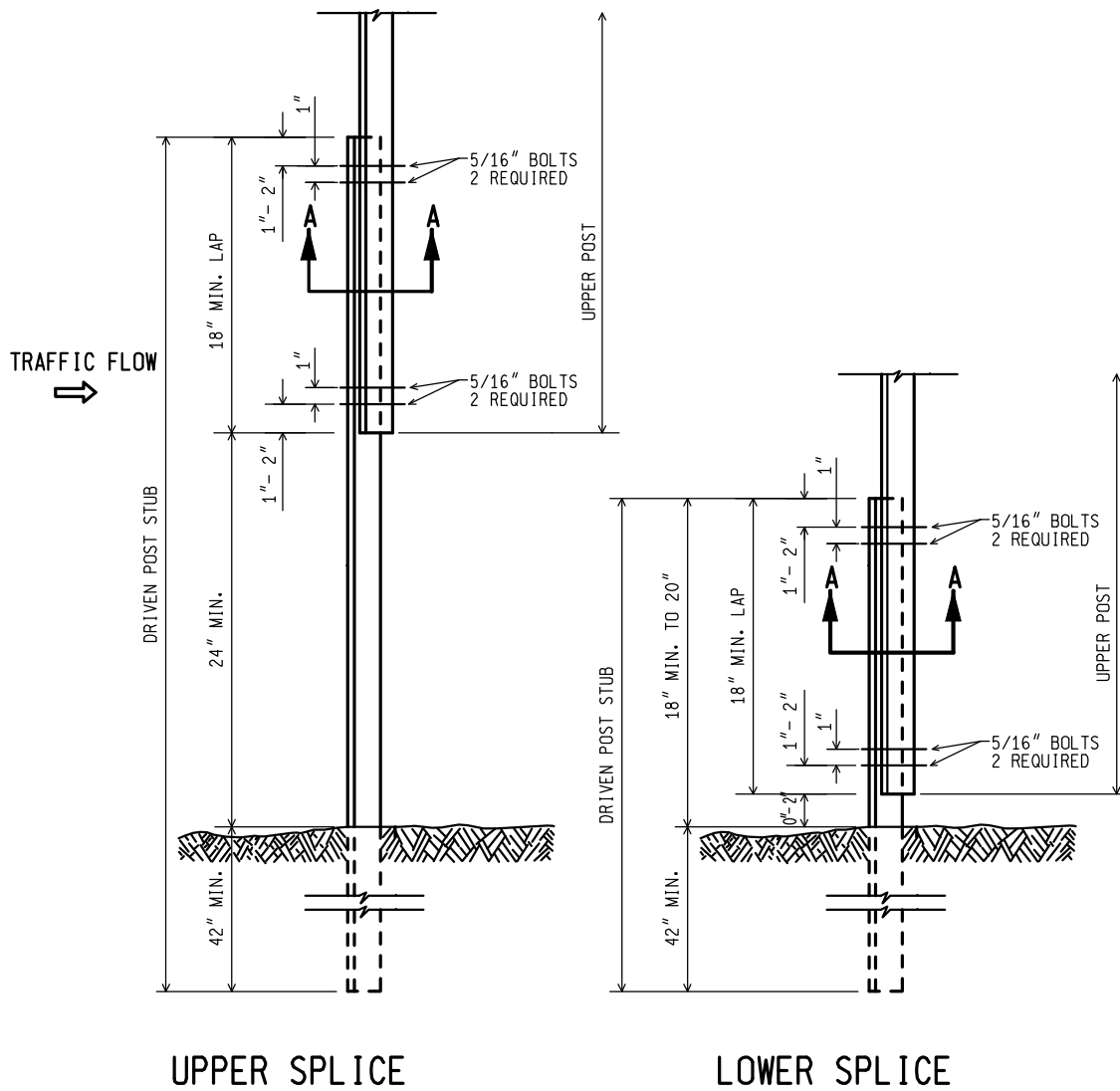
8/2006
 PLAN DATE

WZD-100-A

SHEET
 4 of 11

File:PW/Doc/RD/T&S/Typ/Dev/Sign MainTraf D/WZD-100-A Rev. 8/21/06 ECH

NOTE: THE ORIGINAL SIGNED COPY IS KEPT ON FILE AT THE MICHIGAN DEPARTMENT OF TRANSPORTATION.



**3 lb. U - CHANNEL STEEL POST
(WITH SPLICE)**

MOUNT SIGN ON OPEN FACE OF
UPPER U - CHANNEL STEEL POST

NOT TO SCALE

MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS DELIVERY STANDARD PLAN

PENDING
FHWA APPROVAL DATE

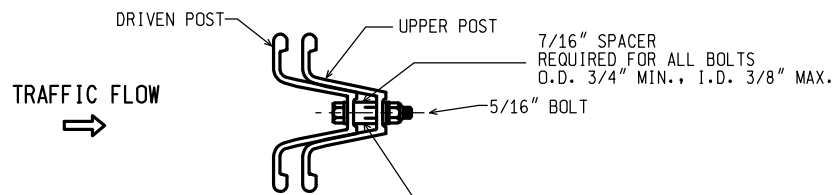
8/2006
PLAN DATE

WZD-100-A

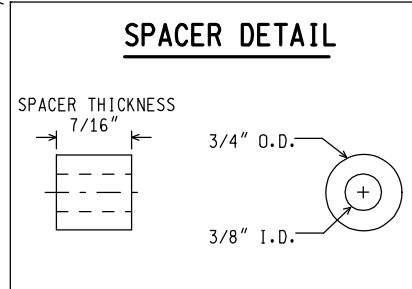
SHEET
5 of 11

File:PW/Doc/RD/T&S/Typ/Dev/Sign MainTraf D/WZD-100-A Rev. 8/21/06 ECH

NOTE: THE ORIGINAL SIGNED COPY IS KEPT ON FILE AT THE MICHIGAN DEPARTMENT OF TRANSPORTATION.



SECTION A-A



NOTES:

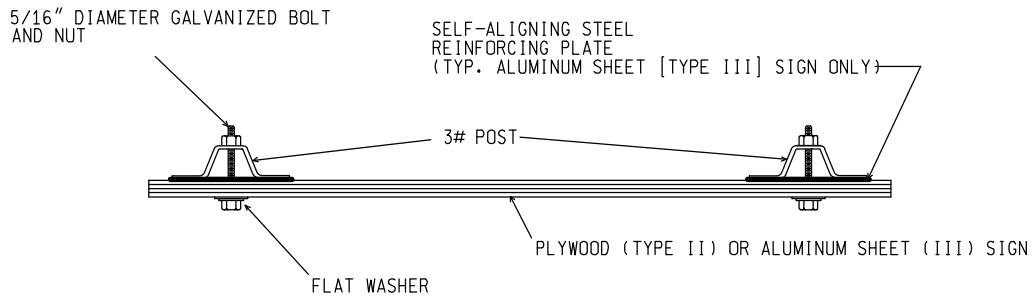
1. THE SPACER THICKNESS SHALL BE 1/16" LESS THAN THE GAP BETWEEN THE POST WHEN POSITIONED IN THE UNBOLTED CONFIGURATION.
2. THE EXTERIOR BOLT (CLOSEST TO LAP), SPACER, WASHER, AND NUT SHALL BE INSTALLED IN A PREPUNCHED HOLE 1" TO 2" FROM THE END OF THE LAP.
3. THE INTERIOR BOLT (FARTHEST FROM LAP), SPACER, WASHER, AND NUT SHALL BE INSTALLED IN THE NEXT PREPUNCHED HOLE.
4. THE DRIVEN POST SHALL ALWAYS BE MOUNTED IN FRONT OF THE UPPER POST WITH RESPECT TO THE ADJACENT ONCOMING TRAFFIC, REGARDLESS OF THE DIRECTION THE SIGN IS FACING.
5. THE SPLICE LAP SHALL BE FASTENED BY FOUR-5/16" DIA. GALVANIZED A449 BOLTS (SAE J429 GRADE 5) OR GALVANIZED A325 BOLTS.

3 lb. U - CHANNEL STEEL POST
(WITH SPLICE)

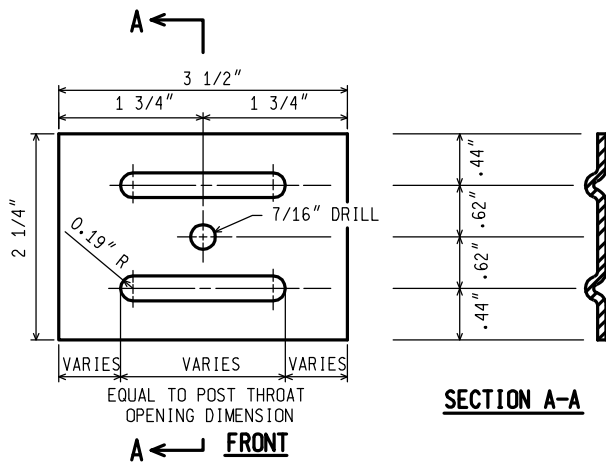
NOT TO SCALE

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|--|--------------------|--------|-----------|------------------|
| MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAYS DELIVERY STANDARD PLAN | PENDING | 8/2006 | WZD-100-A | SHEET 6 of 11 |
| | FHWA APPROVAL DATE | | | |
| File:PW/Doc/RD/T&S/Typ/Dev/Sign MainTraf D/WZD-100-A Rev. 8/21/06 ECH | | | | |

NOTE: THE ORIGINAL SIGNED COPY IS KEPT ON FILE AT THE MICHIGAN DEPARTMENT OF TRANSPORTATION.



SIGN TO 3 lb. POST CONNECTION



NOTES: (FOR STEEL SIGN REINF' PLATE)

1. MATERIAL: 12 GAUGE CARBON STEEL.
2. TOLERANCE ON ALL DIMENSIONS $\pm 0.0625"$
3. FINISH-AFTER STAMPING AND PUNCHING, GALVANIZE ACCORDING TO CURRENT SPECIFICATIONS FOR ZINC (HOT GALVANIZE) COATINGS ON PRODUCTS FABRICATED FROM PLATES OR STRIPS

STEEL SIGN REINFORCING PLATE
REQUIRED FOR TYPE III SIGNS ONLY

3 lb. U - CHANNEL STEEL POST SIGN CONNECTION

NOT TO SCALE

MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS DELIVERY STANDARD PLAN

PENDING
FHWA APPROVAL DATE

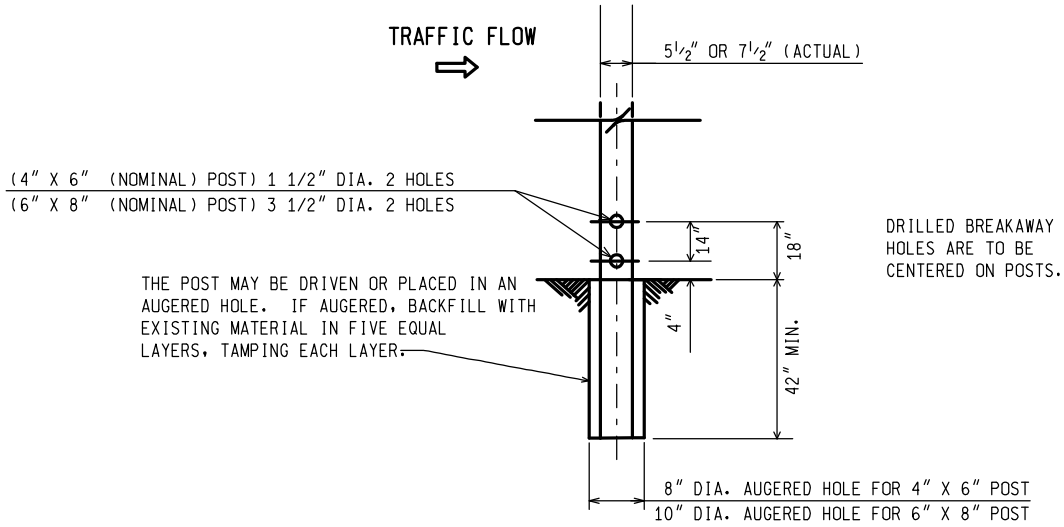
8/2006
PLAN DATE

WZD-100-A

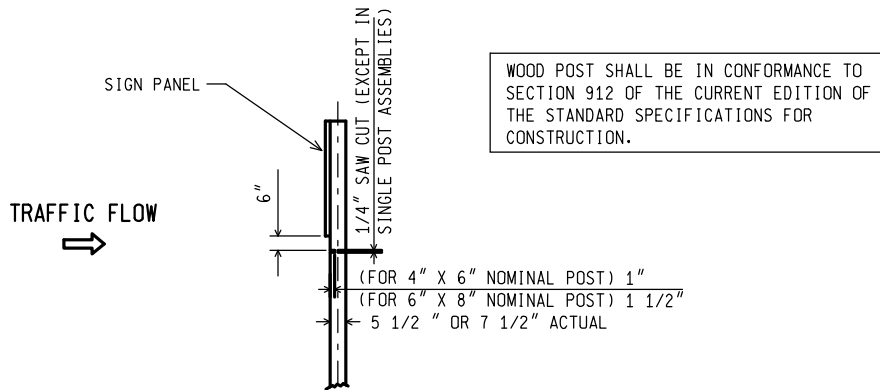
SHEET
7 of 11

File:PW/Doc/RD/T&S/Typ/Dev/Sign MainTraf D/WZD-100-A Rev. 8/21/06 ECH

NOTE: THE ORIGINAL SIGNED COPY IS KEPT ON FILE AT THE MICHIGAN DEPARTMENT OF TRANSPORTATION.



**WOOD POST BREAKAWAY HOLES/
 DIRECT EMBEDMENT DETAILS**



**SAW CUT DETAIL
 (MULTIPLE POST INSTALLATIONS)**

WOOD POST DETAILS

NOT TO SCALE

MICHIGAN DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS DELIVERY STANDARD PLAN

PENDING
 FHWA APPROVAL DATE

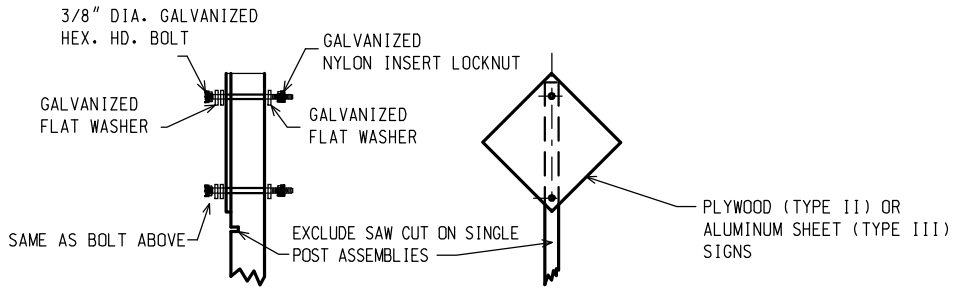
8/2006
 PLAN DATE

WZD-100-A

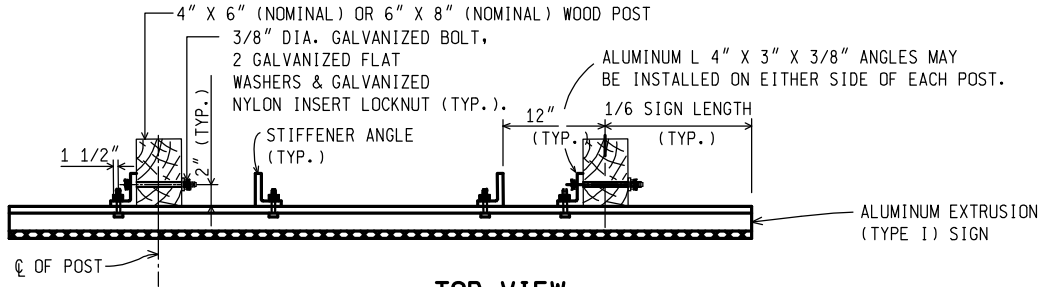
SHEET
 8 of 11

File:PW/Doc/RD/T&S/Typ/Dev/Sign MainTraf D/WZD-100-A Rev. 8/21/06 ECH

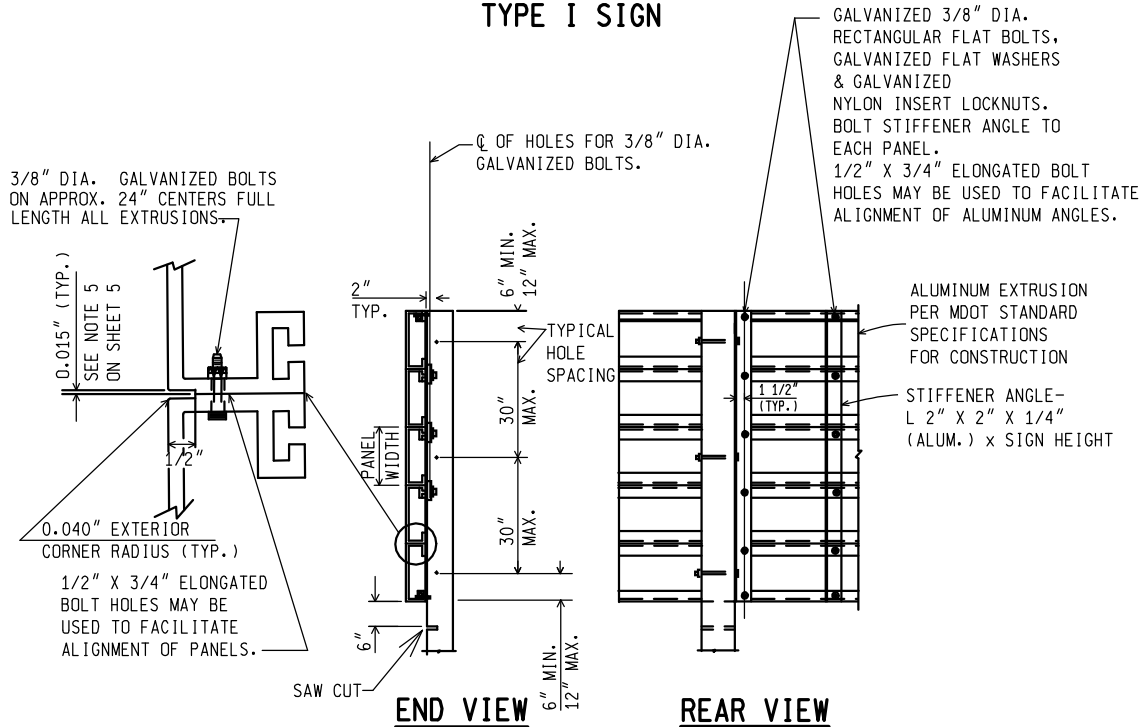
NOTE: THE ORIGINAL SIGNED COPY IS KEPT ON FILE AT THE MICHIGAN DEPARTMENT OF TRANSPORTATION.



TYPE II AND TYPE III SIGNS



**TOP VIEW
TYPE I SIGN**



TYPE I SIGN - ERECTION DETAILS

WOOD POST CONNECTIONS

NOT TO SCALE

MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS DELIVERY STANDARD PLAN

PENDING
FHWA APPROVAL DATE

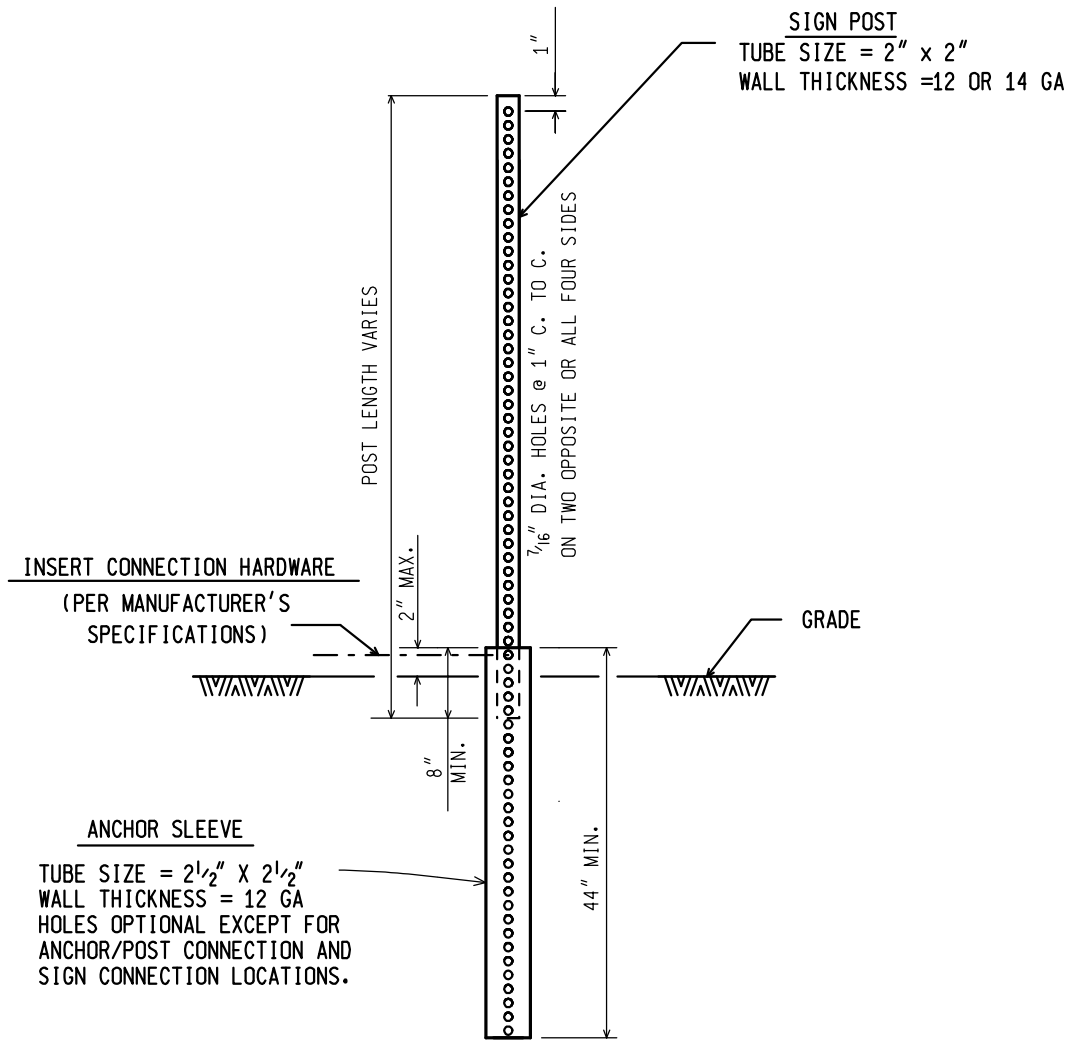
8/2006
PLAN DATE

WZD-100-A

SHEET
9 of 11

File:PW/Doc/RD/T&S/Typ/Dev/Sign MainTraf D/WZD-100-A Rev. 8/21/06 ECH

NOTE: THE ORIGINAL SIGNED COPY IS KEPT ON FILE AT THE MICHIGAN DEPARTMENT OF TRANSPORTATION.



SQUARE TUBULAR STEEL POST

NOT TO SCALE

| | | | | |
|--|--------------------|--------|-----------|-------------------|
| MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAYS DELIVERY STANDARD PLAN | PENDING | 8/2006 | WZD-100-A | SHEET 10 of 11 |
| | FHWA APPROVAL DATE | | | |

NOTE: THE ORIGINAL SIGNED COPY IS KEPT ON FILE AT THE MICHIGAN DEPARTMENT OF TRANSPORTATION.

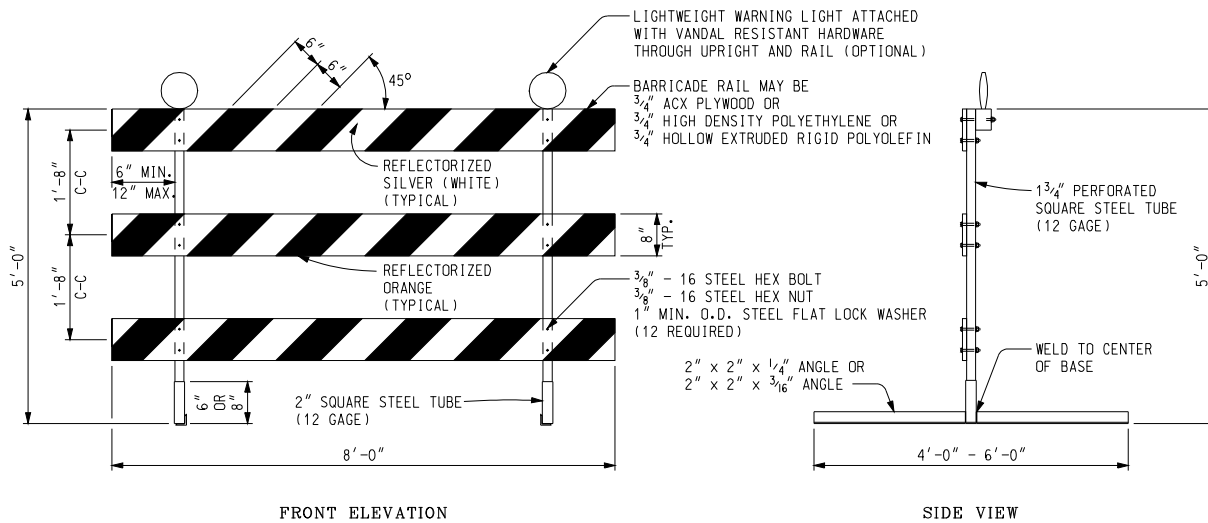
GENERAL NOTES:

1. A MAXIMUM OF TWO POSTS WITHIN A 7 FOOT PATH IS PERMITTED.
2. ALL SIGN POSTS SHALL COMPLY WITH NCHRP 350.
3. ALL POSTS SHALL BE EMBEDDED A MINIMUM OF 42".
4. BRACING OF POST IS NOT PERMITTED.
5. SIGN SHALL BE LEVEL, AND UPRIGHT FOR THE DURATION OF INSTALLATION.
6. ERECT POSTS SO THE SIGN FACE AND SUPPORTS DO NOT VARY FROM PLUMB BY MORE THAN 3/16" IN 3'. PROVIDE A CENTER-TO-CENTER DISTANCE BETWEEN POSTS WITHIN 2 PERCENT OF PLAN DISTANCE.
7. NO MORE THAN ONE SPLICE PER POST, AS SHOWN, WILL BE PERMITTED.
8. POST TYPES SHALL NOT BE MIXED WITHIN A SIGN SUPPORT INSTALLATION.
9. NO VERTICAL JOINTS ARE PERMITTED IN SIGN. NO HORIZONTAL JOINTS THROUGH SIGN LEGEND OR SYMBOLS ARE PERMITTED IN SIGN
10. REMOVE SIGN POSTS AND/OR POST STUBS IN THEIR ENTIRETY WHEN NO LONGER REQUIRED.
11. ALL LABOR, MATERIALS, AND EQUIPMENT, INCLUDING TEMPORARY SUPPORTS REQUIRED TO INSTALL, MAINTAIN, RELOCATE, COVER, AND/OR REMOVE THE TEMPORARY SIGN, INCLUDING SUPPORTS, ARE CONSIDERED TO BE INCLUDED IN THE COST OF THE TEMPORARY SIGN.
12. SAW CUTS IN WOOD POSTS ARE TO BE PARALLEL TO THE BOTTOM OF THE SIGN.
13. POSTS SHALL NOT EXTEND MORE THAN 4" ABOVE TOP OF SIGN.

NOT TO SCALE

| | | | | |
|--|-------------------------------|---------------------|-----------|-------------------|
| MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAYS DELIVERY STANDARD PLAN | PENDING FHWA APPROVAL DATE | 8/2006 PLAN DATE | WZD-100-A | SHEET 11 of 11 |
| File:PW/Doc/RD/T&S/Typ/Dev/Sign MainTraf D/WZD-100-A Rev. 8/21/06 ECH | | | | |

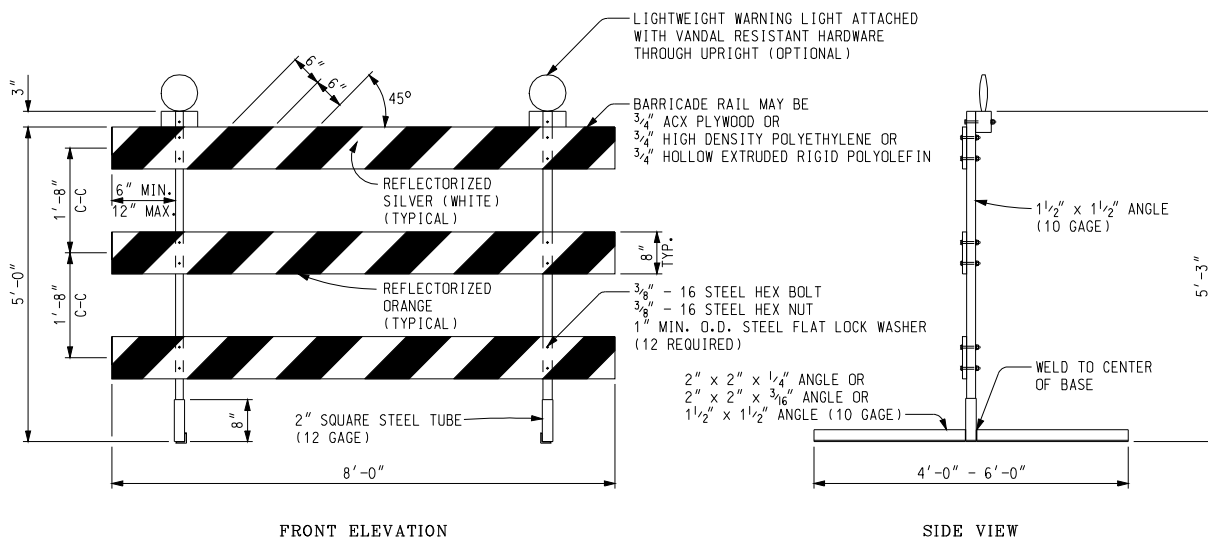
NOTE: THE ORIGINAL SIGNED COPY IS KEPT ON FILE AT THE MICHIGAN DEPARTMENT OF TRANSPORTATION.



FRONT ELEVATION

SIDE VIEW

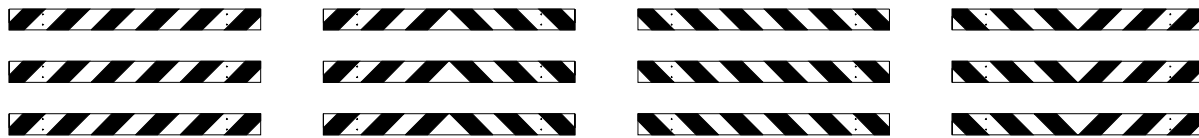
PERFORATED SQUARE STEEL TUBE OPTION



FRONT ELEVATION

SIDE VIEW

ANGLE IRON OPTION



LEFT DIRECTIONAL

BI-DIRECTIONAL

RIGHT DIRECTIONAL

CLOSURES

BARRICADE RAIL SHEETING OPTIONS
TYPE III BARRICADES

Other Type III Barricades meeting current NCHRP crash worthy criteria can be found on the FHWA Safety website at

http://safety.fhwa.dot.gov/roadway_dept/road_hardware/wzd.htm

NOT TO SCALE

File: T&S/Typ/Signs/WorkZones/wzd 125 d

Rev. 09/22/09 PJ



PREPARED BY
TRAFFIC AND SAFETY

DRAWN BY: ECH

CHECKED BY: MWB

ENGINEER OF DELIVERY

ENGINEER OF DEVELOPMENT

(SPECIAL DETAIL)

FHWA APPROVAL DATE

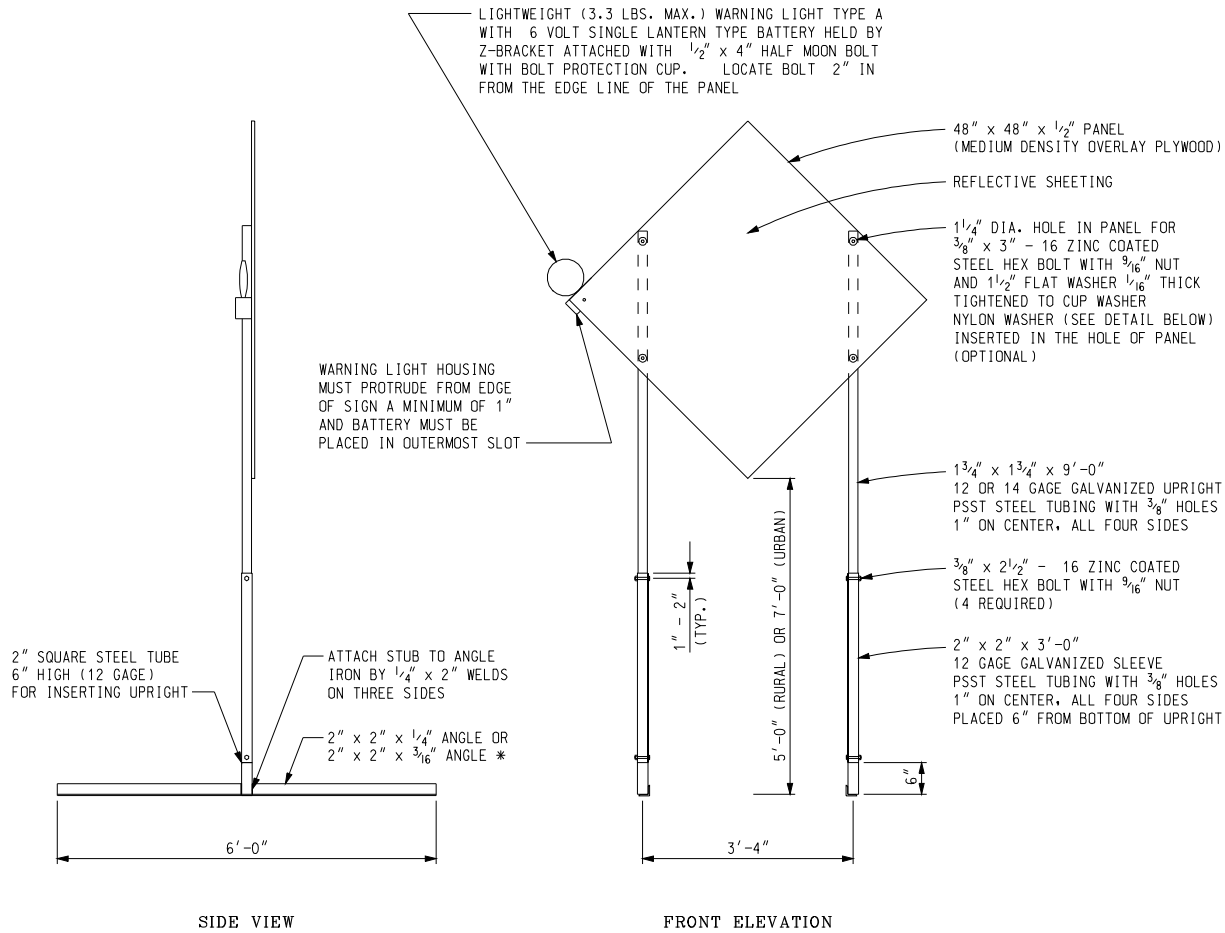
MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS DELIVERY STANDARD PLAN FOR

Temporary
Traffic Control Devices

9/22/09
PLAN DATE

WZD-125-E

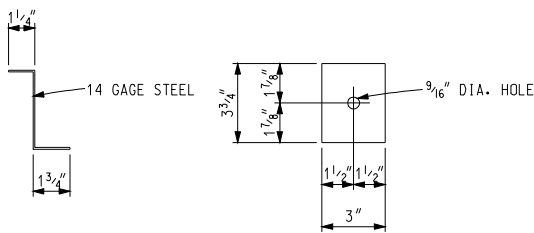
SHEET
1 of 3



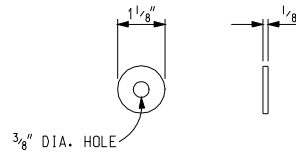
TEMPORARY SIGN SUPPORT

(WARNING LIGHT PLACED ON SIDE CLOSEST TO TRAFFIC)

* SIGN STAND IS BALLASTED WITH FOUR OR MORE 35 LB SANDBAGS. A MINIMUM OF ONE ON EACH END.
 UPRIGHTS SHALL NOT EXTEND ABOVE THE SIGN PANEL.



Z-BRACKET DETAIL



OPTIONAL NYLON WASHER

Other temporary sign supports meeting current NCHRP crash worthy criteria can be found on the FHWA Safety website at http://safety.fhwa.dot.gov/roadway_dept/road_hardware/wzd.htm

NOT TO SCALE

MICHIGAN DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS DELIVERY STANDARD PLAN

(SPECIAL DETAIL)
 FHWA APPROVAL DATE

9/22/09
 PLAN DATE

WZD-125-E

SHEET
 2 of 3

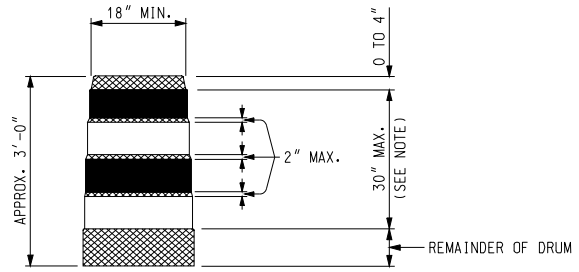
File: T&S/Typ/Signs/WorkZones/wzd 125 d

Rev. 09/22/09 PJ

NOTE: THE ORIGINAL SIGNED COPY IS KEPT ON FILE AT THE MICHIGAN DEPARTMENT OF TRANSPORTATION.

- PLASTIC DRUM
- ▲▲▲ PROPOSED TYPE III BARRICADE
- △△△ EXISTING TYPE III BARRICADE

SYMBOLS TO BE USED ON PLANS



- REFLECTORIZED ORANGE
- REFLECTORIZED WHITE
- NON REFLECTORIZED ORANGE

NOTE:
 DRUMS SHALL HAVE AT LEAST 4 HORIZONTAL REFLECTORIZED STRIPES (2 ORANGE AND 2 WHITE) OF 6" UNIFORM WIDTH, ALTERNATING IN COLOR WITH THE TOPMOST REFLECTORIZED STRIPE BEING ORANGE. NON REFLECTORIZED SPACES BETWEEN THE HORIZONTAL REFLECTORIZED ORANGE AND WHITE STRIPES SHALL BE ORANGE IN COLOR AND EQUAL IN WIDTH.

PLASTIC DRUM

NOTES:

2" PERFORATED SQUARE STEEL TUBES MAY BE USED TO FABRICATE THE HORIZONTAL BASE OF THE TYPE III BARRICADE.

WARNING LIGHTS SHALL BE PLACED ACCORDING TO THE CURRENT STANDARD SPECIFICATIONS FOR CONSTRUCTION AND ALL OTHER PROVISIONS IN THE CONTRACT WHEN THEY ARE USED ON TYPE III BARRICADES.

SEE ROAD STANDARD PLANS R-113-SERIES FOR TEMPORARY CROSSOVERS FOR DIVIDED ROADWAY, AND R-126-SERIES FOR TYPICAL LOCATION AND SPACING OF PLASTIC DRUMS FOR PLACEMENT OF TEMPORARY CONCRETE BARRIER.

SIGNS, BARRICADES, AND PLASTIC DRUMS SHALL BE FACED WITH PRESSURE-SENSITIVE REFLECTIVE SHEETING ACCORDING TO THE CURRENT STANDARD SPECIFICATIONS FOR CONSTRUCTION.

SANDBAGS SHALL BE USED WHEN SUPPLEMENTAL WEIGHTS ARE REQUIRED TO ACHIEVE STABILITY OF THE BARRICADE. THE SANDBAGS SHALL BE PLACED SO THEY WILL NOT COVER OR OBSTRUCT ANY REFLECTIVE PORTION OF THE TRAFFIC CONTROL DEVICE.

NOT TO SCALE

| | | | | |
|--|--|-----------|-----------|-----------------|
| MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAYS DELIVERY STANDARD PLAN | (SPECIAL DETAIL) FHWA APPROVAL DATE | 9/22/09 | WZD-125-E | SHEET 3 of 3 |
| File: T&S/Typ/Signs/WorkZones/wzd 125 d | Rev. 09/22/09 PJ | PLAN DATE | | |

NOTE: THE ORIGINAL SIGNED COPY IS KEPT ON FILE AT THE MICHIGAN DEPARTMENT OF TRANSPORTATION.



Notice of Authorization

Permit Number 13-03-0123-P

Issued: 01/08/2014

Expiration Date: 01/08/2019

The Michigan Department of Environmental Quality, Water Resources Division, P.O. Box 30458, Lansing, Michigan 48909-7958, under provisions of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, and specifically:

- Part 31, Floodplain Regulatory Authority of the Water Resources Protection.
- Part 301, Inland Lakes and Streams.
- Part 303, Wetlands Protection.
- Part 315, Dam Safety.
- Part 323, Shorelands Protection and Management.
- Part 325, Great Lakes Submerged Lands.
- Part 353, Sand Dunes Protection and Management.

Authorized activity:

Upgrade Division Street to include the following regulated activities:

- 1) At the crossing of the Bisbee Drain (Buck Creek) - remove the existing 48 feet long 6 feet span by 6 feet rise concrete box culvert and the 50 feet long, 36 inch diameter corrugated metal culvert and install a 108 feet long, 12 feet span, 10 feet rise concrete box culvert recessed 3.6 feet. Place 47 cubic yards of riprap.**
- 2) At the crossing of an unnamed drain- remove the exiting 54 feet long, 1.5 feet diameter corrugated metal culvert and install an 84 feet long, 2 feet diameter concrete culvert. Place 8.4 cubic yards of riprap.**
- 3) Install 3- 24 inch diameter storm water outfalls to Bisbee Drain (Buck Creek) in the NW, NE and SE quadrants.**

To be conducted at property located in: Allegan County, Waterbody: Various Section 1 and 12, Town 4N, Range 12W, Dorr Township.

Permittee: Allegan County Road Commission
1308 Lincoln Road
Allegan, MI 49010

Holly Vickers
Water Resources Division
616-295-2787

*This notice must be displayed at the site of work.
Laminating this notice or utilizing sheet protectors is recommended.*

Please refer to the above Permit Number with any questions or concerns.



**MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER RESOURCES DIVISION
PERMIT**

ISSUED TO:

Allegan County Road Commission
1308 Linclon Road
Allegan, MI 49010

| | |
|-------------------|-----------------|
| Permit No. | 13-03-0123-P |
| Issued | January 8, 2014 |
| Extended | |
| Revised | |
| Expires | January 8, 2019 |

This permit is being issued by the Michigan Department of Environmental Quality (MDEQ) under the provisions of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), and specifically:

- | | |
|--|---|
| <input checked="" type="checkbox"/> Part 301, Inland Lakes and Streams | <input type="checkbox"/> Part 315, Dam Safety |
| <input type="checkbox"/> Part 325, Great Lakes Submerged Lands | <input type="checkbox"/> Part 323, Shorelands Protection and Management |
| <input type="checkbox"/> Part 303, Wetlands Protection | <input type="checkbox"/> Part 353, Sand Dunes Protection and Management |
| <input checked="" type="checkbox"/> Part 31, Floodplain/Water Resources Protection | |

Permission is hereby granted, based on permittee assurance of adherence to State of Michigan requirements and permit conditions, to:

Permitted Activity:
Upgrade Division Street to include the following regulated activities:

- 1) At the crossing of the Bisbee Drain (Buck Creek)- remove the existing 48 feet long 6 feet span by 6 feet rise concrete box culvert and the 50 feet long, 36 inch diameter corrugated metal culvert and install a 108 feet long, 12 feet span, 10 feet rise concrete box culvert recessed 3.6 feet. Place 47 cubic yards of riprap.**
- 2) At the crossing of an unnamed drain- remove the exiting 54 feet long, 1.5 feet diameter corrugated metal culvert and install an 84 feet long, 2 feet diameter concrete culvert. Place 8.4 cubic yards of riprap.**
- 3) Install 3- 24 inch diameter storm water outfalls to Bisbee Drain (Buck Creek) in the NW, NE and SE quadrants.**

Water Course Affected: Various

Property Location: Allegan County, Dorr Township, Section 1 and 12
 Subdivision, Lot Town/Range 4N, 12W Property Tax No.

Authority granted by this permit is subject to the following limitations:

- A. Initiation of any work on the permitted project confirms the permittee's acceptance and agreement to comply with all terms and conditions of this permit.
- B. The permittee, in exercising the authority granted by this permit, shall not cause unlawful pollution as defined by Part 31, Water Resources Protection, of the NREPA.
- C. This permit shall be kept at the site of the work and available for inspection at all times during the duration of the project or until its date of expiration.
- D. All work shall be completed in accordance with the approved plans and specifications submitted with the application and/or plans and specifications attached to this permit.
- E. No attempt shall be made by the permittee to forbid the full and free use by the public of public waters at or adjacent to the structure or work approved.
- F. It is made a requirement of this permit that the permittee give notice to public utilities in accordance with Act 53 of the Public Act of 1974 and comply with each of the requirements of that Act.


- G. This permit does not convey property rights in either real estate or material, nor does it authorize any injury to private property or invasion of public or private rights, nor does it waive the necessity of seeking federal assent, all local permits, or complying with other state statutes.
- H. This permit does not prejudice or limit the right of a riparian owner or other person to institute proceedings in any circuit court of this state when necessary to protect his rights.
- I. Permittee shall notify the MDEQ within one week after the completion of the activity authorized by this permit, by completing and forwarding the attached preaddressed postcard to the office addressed thereon.
- J. This permit shall not be assigned or transferred without the written approval of the MDEQ.
- K. Failure to comply with conditions of this permit may subject the permittee to revocation of permit and criminal and/or civil action as cited by the specific state act, federal act, and/or rule under which this permit is granted.
- L. All dredged or excavated materials shall be disposed of in an upland site (outside of floodplains, unless exempt under Part 31, and wetland).
- M. In issuing this permit, the MDEQ has relied on the information and data that the permittee has provided in connection with the submitted application for permit. If, subsequent to the issuance of a permit, such information and data prove to be false, incomplete, or inaccurate, the MDEQ may modify, revoke, or suspend the permit, in whole or in part, in accordance with the new information.
- N. The permittee shall indemnify and hold harmless the State of Michigan and its departments, agencies, officials, employees, agents, and representatives for any and all claims or causes of action arising from acts or omissions of the permittee, or employees, agents, or representative of the permittee, undertaken in connection with this permit. The permittee's obligation to indemnify the State of Michigan applies only if the State (1) provides the permittee or its designated representative written notice of the claim or cause of action within 30 days after it is received by the State and (2) consents to the permittee's participation in the proceeding on the claim or cause of action. It does not apply to contested case proceedings under the Administrative Procedures Act challenging the permit. This permit shall not be construed as an indemnity by the State of Michigan for the benefit of the permittee or any other person.
- O. Noncompliance with these terms and conditions and/or the initiation of other regulated activities not specifically authorized shall be cause for the modification, suspension, or revocation of this permit, in whole or in part. Further, the MDEQ may initiate criminal and/or civil proceedings as may be deemed necessary to correct project deficiencies, protect natural resource values, and secure compliance with statutes.
- P. If any change or deviation from the permitted activity becomes necessary, the permittee shall request, in writing, a revision of the permitted activity from the MDEQ. Such revision request shall include complete documentation supporting the modification and revised plans detailing the proposed modification. Proposed modifications must be approved, in writing, by the MDEQ prior to being implemented.
- Q. This permit may be transferred to another person upon written approval of the MDEQ. The permittee must submit a written request to the MDEQ to transfer the permit to the new owner. The new owner must also submit a written request to the MDEQ to accept transfer. The new owner must agree, in writing, to accept all conditions of the permit. A single letter signed by both parties which includes all the above information may be provided to the MDEQ. The MDEQ will review the request and if approved, will provide written notification to the new owner.
- R. Prior to initiating permitted construction, the permittee is required to provide a copy of the permit to the contractor(s) for review. The property owner, contractor(s), and any agent involved in exercising the permit are held responsible to ensure that the project is constructed in accordance with all drawings and specifications. The contractor is required to provide a copy of the permit to all subcontractors doing work authorized by the permit.
- S. Construction must be undertaken and completed during the dry period of the wetland. If the area does not dry out, construction shall be done on equipment mats to prevent compaction of the soil.
- T. Authority granted by this permit does not waive permit requirements under Part 91, Soil Erosion and Sedimentation Control, of the NREPA, or the need to acquire applicable permits from the County Enforcing Agent.
- U. Authority granted by this permit does not waive permit requirements under the authority of Part 305, Natural Rivers, of the NREPA. A Natural Rivers Zoning Permit may be required for construction, land alteration, streambank stabilization, or vegetation removal along or near a natural river.
- V. The permittee is cautioned that grade changes resulting in increased runoff onto adjacent property is subject to civil damage litigation.
- W. Unless specifically stated in this permit, construction pads, haul roads, temporary structures, or other structural appurtenances to be placed in a wetland or on bottomland of the waterbody are not authorized and shall not be constructed unless authorized by a separate permit or permit revision granted in accordance with the applicable law.
- X. For projects with potential impacts to fish spawning or migration, no work shall occur within fish spawning or migration timelines (i.e., windows) unless otherwise approved in writing by the MDNR, Fisheries Division.
- Y. Work to be done under authority of this permit is further subject to the following special instructions and specifications:
1. All work shall be completed in accordance with plans dated received October 18, 2013; kept on file at the MDEQ, Water Resources Division (WRD), Transportation and Flood Hazard Unit.
 2. Authority granted by this permit does not waive compliance requirements under Part 91, Soil Erosion and Sedimentation Control, of the NREPA. Any discharge of sediment into waters of the state and/or off the road right-of-way is a violation of this permit, Part 91, and Part 31, Water Resources Protection, of the NREPA. A violation of these parts subjects the permittee to potential fines and penalties.
 3. This permit does not authorize or sanction work that has been completed in violation of applicable federal, state, or local statutes.

4. The permittee is responsible for acquiring all necessary easements or rights-of-way before commencing any work authorized by this permit. All construction operations relating to or part of this project shall be confined to the existing right-of-way limits or other acquired easements.
5. Temporary soil erosion and sedimentation control measures shall be installed before or upon commencement of the earth change and shall be maintained daily. Temporary soil erosion and sedimentation control measures shall be maintained until permanent soil erosion and sedimentation control measures are in place and the area is stabilized. Permanent soil erosion and sedimentation control measures for all slopes, channels, ditches, or any disturbed area shall be installed within five (5) calendar days after final grading or the final earth change has been completed.
6. All raw areas in uplands resulting from the permitted construction activity shall be effectively stabilized with sod and/or seed and mulch (or other technology specified by this permit or project plans) in a sufficient quantity and manner to prevent erosion and any potential siltation to surface waters or wetlands. Temporary stabilization measures shall be installed before or upon commencement of the permitted activity, and shall be maintained until permanent measures are in place. Permanent measures shall be in place within five (5) days of achieving final grade.
7. All raw earth within 100 feet of a lake, stream, or wetland that is not brought to final stabilization by the end of the active growing season shall be temporarily stabilized with mulch blankets in accordance with the following dates: September 20th for the Upper Peninsula, October 1st for the Lower Peninsula north of US-10, and October 10th for the Lower Peninsula south of US-10.
8. This permit placard shall be kept posted at the work site, in a prominent location at all times for the duration of the project, or until permit expiration.
9. This permit is being issued for the maximum time allowed and no extensions of this permit will be granted. Initiation of the construction work authorized by this permit indicates the permittee's acceptance of this condition. The permit, when signed by the MDEQ, will be for a five-year period beginning at the date of issuance. If the project is not completed by the expiration date, a new permit must be sought.
10. All dredge/excavated spoils including organic and inorganic soils, vegetation, and other material removed shall be placed on upland (non-wetland, non-floodplain or non-bottomland), prepared for stabilization, revegetated and reseeded with native Michigan species appropriate to the site, and mulched in such a manner so as to prevent and ensure against erosion of any material into any waterbody, wetland, or floodplain.
11. During removal or repair of the existing structure, every precaution shall be taken to prevent debris from entering any watercourse. Any debris reaching the watercourse during the removal and/or reconstruction of the structure shall be immediately retrieved from the water. All material shall be disposed of in an acceptable manner consistent with local, state, and federal regulations.
12. Prior to the removal of the existing structures, cofferdams of steel sheet piling, gravel bags, clean stone, coarse aggregate, concrete or other acceptable barriers shall be installed to isolate all construction activity from the water. The barriers shall be maintained in good working order throughout the duration of the project. Upon project completion, the accumulated materials shall be removed and disposed of at an upland site.
13. All cofferdam and temporary steel sheet pile shall then be removed in its entirety, unless specifically shown to be left in place on the accepted plans. Cofferdam and sheet pile that is left in place shall be cut off at the elevation shown on the plans and shall be a minimum of one foot below the stream bottom.
14. The existing structure shall be kept open to pass the stream flow during removal of the existing road fill.
15. The placement of the new culvert and the initial placement of fill in the stream shall be done immediately after removal of the existing culvert. The placement shall be conducted in such a manner that all flow is immediately passed through the new culverts, allowing the major placement of fill to be done in the dry or in still water where erosion and sedimentation will be minimized. The fill material used in this initial placement

shall be washed gravel, coarse aggregate, or rock and shall be placed at both ends of the culvert to a level above normal water level before backfill material is placed.

16. The culvert shall be installed to align with the center line of the existing stream at both the inlet and outlet ends, and must be recessed into the stream bed to provide a natural channel substrate throughout the structure, as shown on the approved plans.
17. Road fill side slopes shall not be steeper than 1-on-2 (1 vertical to 2 horizontal) except where headwalls of reinforced concrete, mortar masonry, dry masonry, or other acceptable methods are used.
18. Road fill side slopes terminating in the stream and any raw streambanks resulting from the construction shall be stabilized with temporary measures in accordance with appropriate Best Management Practices based on site conditions, and if necessary, may be riprapped extending above the ordinary high water mark, before or upon commencement of the permitted activity. Temporary stabilization measures shall be maintained until permanent measures are in place.
19. All other road fill slopes, ditches, and other raw areas draining directly to the stream may be protected with riprap, sod and/or seed and mulch as may be necessary to provide effective erosion protection. The placement of riprap shall be limited to the minimum necessary to ensure proper stabilization of the side slopes and fill in the immediate vicinity of the structure.
20. If the project, or any portion of the project, is stopped and lies incomplete for any length of time other than that encountered in a normal work week, every precaution shall be taken to protect the incomplete work from erosion, including the placement of temporary gravel bag riprap, temporary seed and mulch, or other acceptable temporary protection.
21. No work shall be done in the stream during periods of above-normal flows except as necessary to prevent erosion.
22. Stormwater must be treated prior to directly outletting to the streams.

By: _____



Holly Vickers
Water Resources Division
616-295-2787

cc: Dorr Township Clerk
Allegan County Drain Commissioner
Allegan CEA
Aaron Neitling, Wightman & Associates, Inc.
Kam Jordan, DEQ, WRD
Sarah Ehinger, DEQ, WRD
Derek Haroldson, DEQ, WRD
Jay Wesley, DNR Fisheries

ALLEGAN COUNTY ROAD COMMISSION

SPECIAL PROVISION

FOR

PAVT, REM, MODIFIED

1 of 1

Wightman & Associates, Inc./AJN

01/24/2014

Description

This work consists of removing the existing concrete pavement materials to the limits shown on the plans. Work shall meet the requirements of Section 204 of the MDOT 2012 Standard Specifications for Construction except that removal of existing concrete surfaces, regardless of depth; and composite surfaces, regardless of depth will be included as Pavn, Rem, Modified.

Materials

None Specified

Construction Methods

Saw cut, if necessary, remove and dispose of all materials in accordance with the MDOT Standard Specifications for Construction.

Method of Measurement

Pavn, Rem, Modified will be measured in its original position. Payment for mainline pavement removal shall be based on a width of 20', as determined by the original concrete widths under the road. Payment for pavement removal in driveways will be based upon the field measurements prior to removal.

Basis of Payment

Pavn, Rem, Modified will be paid for by the square yard, in place, which price shall be payment in full for all work specified herein. The removal of curb, curb and gutter, or gutter in conjunction with concrete driveways will be measured and paid as Pavn, Rem, Modified. If it is not removed in conjunction with concrete driveways, the removal shall be paid as Curb and Gutter, Rem.

Pay Item

Pay Unit

Pavn, Rem, Modified

Square Yard

ALLEGAN COUNTY ROAD COMMISSION

SPECIAL PROVISION

FOR

EXCAVATION, EARTH, MODIFIED

1 of 1

Wightman & Associates, Inc./AJN

1/24/2014

Description

The work of Excavation, Earth, Modified shall consist of stripping and disposal of topsoil, removal of aggregate base as well as all brush, bricks, landscaping, posts and other miscellaneous items, all excavation from intersecting roadways, the roadbed, the utilization of all suitable materials in constructing the adjacent fill, the furnishing and placing of borrow. Excavation, Earth, Modified shall apply to the section of this project as noted on the plans where full depth reconstruction is required. The Contractor shall regrade all drives within the ROW or area of designated grading limits to match proposed road elevations, included in the item for Excavation, Earth, Modified.

Construction Methods

Excavation, Earth, Modified shall include all necessary removal, scarifying, plowing, discing, moving, loading, hauling, shaping and compacting the earth to develop the cross section shown on the plans.

The roadbed shall be finished to grade with a blade grader or equivalent equipment. All intersections, approaches, entrances, and driveways shall be graded as shown or as directed as a part of this item. If additional earth is required to complete the full section, the Contractor shall obtain the required Class II materials from borrow to be included in the item of Excavation, Earth, Modified. All excess excavated materials shall be disposed of by the Contractor.

Excavation, Earth – 9,200 Cyds (Est Qty)
Embankment, CIP – 1,800 Cyds (Est Qty)

Method of Measurement

Excavation, Earth, Modified will be measured along the project centerline and shall include both sides of the pavement. No additional measurement will be made for intersecting streets and drives. Machine Grading, Modified will only be measured for payment at locations where shown on the plans.

Basis of Payment

Excavation, Earth, Modified will be paid for by the station, which price shall be payment in full for all work specified herein.

Pay Item

Pay Unit

Excavation, Earth, Modified

Station

ALLEGAN COUNTY ROAD COMMISSION

SPECIAL PROVISION

FOR

APPROACH, SPECIAL

Wightman & Associates, Inc./AJN

01/24/2014

Description

This work shall consist of furnishing special aggregates and constructing driveways according to section 307 of the Standard Specifications for Construction, except as modified herein.

Materials

Provide the following materials to be used as needed for replacement of gravel driveways in kind:

Dense-graded material 21AA slag, 21AA limestone, 21AA crushed concrete, 22A slag, 22A limestone, and/or 22A crushed concrete meeting the gradation requirements of Section 902.

Construction Methods

Construct approaches in accordance with Section 307.03, with the following exceptions.

Each existing gravel driveway shall be replaced in-kind with the dense-graded material that matches the existing driveway as specified on the plans or as directed by the Engineer.

The density provisions of the standard specifications are not waived, however, density testing may be waived at the discretion of the Engineer.

Measurement and Payment

Approach, Special will be measured in place by the square yard area of material actually placed as specified herein.

Pay Item

Pay Unit

Approach, Special

Square Yard

ALLEGAN COUNTY ROAD COMMISSION

SPECIAL PROVISION

FOR

TRENCHING, MODIFIED

Wightman & Associates, Inc./AJN

01/24/2014

Description

This work shall consist of removing all topsoil and sod, earth excavation, all required embankment, root cutting and tree trimming as required, clearing of brush and trees and stumps smaller than 6" diameter, and removing miscellaneous concrete items. If additional embankment beyond what is available on site is required, the Contractor shall furnish granular material from borrow to be included in the item of Trenching, Modified.

Construction Methods

All work shall be done in accordance with the applicable sections of the Standard Specifications. All excess cut material shall be hauled from the site (Estimated Quantity = 11,500 Cyds). All embankments directly beneath the roadway and shoulder and within a 1 on 1 slope will be Class II granular material (Estimated Quantity = 1,500 Cyds). This item includes all excavation and embankment necessary for the roadway widening and ditch construction from the existing edge of pavement to the right-of-way or grading limits shown on the plans.

Method of Measurement

Trenching, Modified will be measured along the edge of proposed roadway pavement for the entire project limits. Trenching, Modified will not be measured for payment along curb radii for driveway openings. Each side of the roadway will be measured separately for payment.

Basis of Payment

The contract unit price bid per station for Trenching, Modified will be payment in full for furnishing all equipment and labor, placing all embankments, disposing of surplus material from the trench, shaping the ditches, and all other work specified above.

Pay Item

Pay Unit

Trenching, Modified

Station

ALLEGAN COUNTY ROAD COMMISSION

SPECIAL PROVISION

FOR

APPROACH, CL I, 6 INCH, MODIFIED

Wightman & Associates, Inc./AJN

01/24/2014

Description

This work shall consist of furnishing aggregate and constructing driveway approaches according to section 307 of the Standard Specifications for Construction, except as modified herein.

Materials

Provide material in accordance with Section 307.02 with the following modifications:

For Class I driveways requiring a paved surface, Cold-Milled HMA material from the site may be used in-lieu of 21A, 21AA, or 22A provided the material approximates the gradation of 22A material.

The Engineer shall test and approve the milled material before it is used on the project.

Construction Methods

Construct approaches in accordance with Section 307.03 with the following modifications:

If milled material is used for approach, it shall be used full depth to obtain the required thickness. 22A gravel shall not be placed on top of HMA millings.

If milled material is used as approach aggregate, the density provisions of the standard specifications are not waived, however, density testing may be waived at the discretion of the Engineer.

Measurement and Payment

Approach, CI I, 6 inch, Modified will be measured in place by the square yard area of material actually placed as specified herein.

Pay Item

Pay Unit

Approach, CI I, 6 inch, Modified

Square Yard

ALLEGAN COUNTY ROAD COMMISSION

SPECIAL PROVISION

FOR

CULV, PERF, _ INCH

Wightman & Associates, Inc./AJN

01/24/2014

Description

This work shall consist furnishing and placing perforated culvert pipes of the size required, including excavation and backfill in accordance with Section 401 of the Standard Specifications for Construction, except as modified herein.

Materials

No change is made to Section 401.02 for Class F Drive Culverts except the following:

Pipe:

Concrete Pipe (Reinforced and Non-Reinforced): Shall have an open joint to allow for water infiltration/exfiltration through the stone trench.

Smooth Plastic Pipe shall have perforations meeting AASHTO M278.

Corrugated and Spiral Ribbed Steel Pipe: Pipe shall have perforations meeting ASTM A762, for Class 2 perforations.

Granular Material: Shall be Class II, except the loss by wash shall be no greater than 5%.

Stone: The stone shall be MDOT 6A and meet the requirements of Section 902, except the loss by wash shall be no more than 1%.

Geotextile: Shall meet the requirements of Section 910.03A.

Construction Methods

No changes are made to Section 401.03 except the following:

Culvert trench shall be excavated to a minimum depth of 2 inches below the bottom of pipe and shall be a minimum width of the outside pipe diameter plus 1 foot, or 6 inches each side. Immediately after excavation and prior to placing any stone, the geotextile blanket shall be installed on the bottom and sides of the trench. A minimum overlap of 1 foot shall be provided at all joints. After the geotextile blanket is installed the trench shall be backfilled with bedding stone and the pipe installed.

After pipe installation, the pipe shall be backfilled with additional stone until a minimum depth of 6 inches over the pipe is obtained. The geotextile blanket shall be overlapped on the top of the stone with a minimum lap length of 2 foot. At this point the trench shall be backfilled with granular material in accordance with Section 401.03.D, per trench details.

Measurement and Payment

Culv, Perf, _ inch shall be measured in place by the lineal foot of pipe installed and shall include the pipe, furnishing and installing the geotextile, furnishing and installing stone, and backfilling the pipe.

Pay Item

Pay Unit

Culv, Perf, 18 inch

Foot

ALLEGAN COUNTY ROAD COMMISSION

SPECIAL PROVISION

FOR

SEWER, PERF, _ INCH

Wightman & Associates, Inc./AJN

01/24/2014

Description

This work shall consist furnishing and placing perforated storm sewer of the size required, including excavation and backfill in accordance with the plans and details and in accordance with Section 402 of the Standard Specifications for Construction, except as modified herein.

Materials

No change is made to Section 402.02 except the following:

Pipe:

Concrete Pipe (Reinforced and Non-Reinforced): Shall have an open joint to allow for water infiltration/exfiltration through the stone trench.

Smooth Plastic Pipe shall have perforations meeting AASHTO M278.

Corrugated Plastic Pipe: Pipe shall have perforations meeting ASTM A762, for Class 2 perforations.

Granular Material: Shall be Class II, except the loss by wash shall be no greater than 5%.

Stone: The stone shall be MDOT 6A and meet the requirements of Section 902, except the loss by wash shall be no more than 1%.

Geotextile: Shall meet the requirements of Section 910.03A.

Construction Methods

No changes are made to Section 402.03 except the following:

Pipe trench shall be excavated to a minimum depth of 2 inches below the bottom of pipe and shall be a minimum width of the outside pipe diameter plus 1 foot, or 6 inches each side. Immediately after excavation and prior to placing any stone, the geotextile blanket shall be installed on the bottom and sides of the trench. A minimum overlap of 1 foot shall be provided at all joints. After the geotextile blanket is installed the trench shall be backfilled with bedding stone and the pipe installed.

After pipe installation, the pipe shall be backfilled with additional stone until a minimum depth of 6 inches over the pipe is obtained. The geotextile blanket shall be overlapped on the top of the stone with a minimum lap length of 2 foot. At this point the trench shall be backfilled with granular material in accordance with Section 401.03.D, per trench details.

Measurement and Payment

Sewer, Perf, _ inch shall be measured in place by the lineal foot of pipe installed and shall include the pipe, furnishing and installing the geotextile, furnishing and installing stone, and backfilling the pipe.

Pay Item

Pay Unit

Sewer, Perf, 12 inch
Sewer, Perf, 18 inch
Sewer, Perf, 24 inch

Foot
Foot
Foot

ALLEGAN COUNTY ROAD COMMISSION

SPECIAL PROVISION

FOR

UNDERDRAIN, SUBGRADE, OPEN-GRADED, 6 INCH, MODIFIED

Wightman & Associates, Inc./AJN

01/24/2014

Description

This work consists of installing subgrade underdrain according to this special provision and as shown on the plans.

Materials

Materials shall meet the requirements of Section 404, except as noted below:

Smooth-Lined Corrugated Polyethylene Pipe (CPE) and fittings shall meet the requirements of AASHTO M 294. Perforations shall meet the requirements of AASHTO M252.

Corrugated Polyvinyl Chloride (PVC) pipe and fittings shall be manufactured and tested in accordance with ASTM F 949. PVC Pipe and fittings must have a minimum pipe stiffness of 46 psi when tested in accordance with ASTM D2412. The pipe must be double walled with the interior surface being smooth. Pipe joints must be bell and spigot. Perforations shall meet the requirements of AASHTO M252.

Construction Methods

Construct open-graded subgrade underdrain in accordance with Section 404 of the Standard Specifications for Construction.

Measurement and Payment

Underdrain, Subgrade, Open-Graded, 6 inch, Modified shall be measured in place by the lineal foot of pipe installed and shall include the pipe, furnishing and installing the geotextile, and furnishing and installing the open-graded aggregate.

Pay Item

Pay Unit

Underdrain, Subgrade, Open-Graded, 6 inch, Modified

Foot

ALLEGAN COUNTY ROAD COMMISSION

SPECIAL PROVISION

FOR

HMA APPLICATION ESTIMATE

1 of 1

Wightman & Associates, Inc./AJN

1/24/2014

a. Description. Perform this work in accordance with the requirements of Division 5 of the MDOT 2012 Standard Specifications for Construction, except as herein specified.

b. Materials.

Mainline Paving:

HMA, 4E10 (Base) shall have a yield of 220 lbs/syd. (PG 64-28)

HMA, 4E10 (Levelling) shall have a yield of 220 lbs/syd. (PG 64-28)

HMA, 5E10 (Top) shall have a yield of 165 lbs/syd. (PG 64-28)
Aggregate Wear Index = 260 min.

Driveways:

HMA Approach, HMA 13A (Commercial - Top) shall have a yield of 220 lbs/syd. (PG 64-28)

HMA Approach, HMA 13A (Commercial - Base) shall have a yield of 220 lbs/syd. (PG 64-28)

HMA Approach, HMA 13A (Residential - Top) shall have a yield of 165 lbs/syd. (PG 64-28)

HMA Approach, HMA 13A (Residential – Base) shall have a yield of 165 lbs/syd. (PG 64-28)

Bond Coat shall be SS-1h Bond Coat applied at the rate of 0.05 to 0.15 gallons/SYD to be included in the respective HMA mixture items.

Reclaimed Asphalt Pavement (RAP) shall be restricted to Tier 1 limits for all mix designs.
Reclaimed Asphalt Shingles (RAS) shall not be used.

c. Construction Methods. The Special Provision for *Acceptance of HMA Mixture on Local Agency Projects Using the Roller Method* applies.

Cleaning existing pavement shall be included in the respective HMA mixture items.

HMA intersection approaches will not be a separate pay item for this project. All HMA on intersecting streets will be paid for under the mainline HMA bid items.
HMA Approach applies to driveways only.

d. Measurement and Payment. Measurement and Payment will be at the contract unit price per ton. The CONTRACTOR shall be responsible for the control of the HMA application rates for this project. The pay quantity for HMA mixtures on this project shall not exceed more than 5% of the calculated quantities for each course based upon the above referenced yields and the actual areas paved. Quantities in excess of the above will not be considered for payment.

ALLEGAN COUNTY ROAD COMMISSION

SPECIAL PROVISION

FOR

HMA SURFACE, REM, MODIFIED

1 of 1

Wightman & Associates, Inc./AJN

01/24/2014

Description

This work consists of removing the existing hot mix asphalt (HMA) pavement materials to the limits shown on the plans. Work shall meet the requirements of Section 204 of the MDOT 2012 Standard Specifications for Construction except that removal of existing HMA surface, regardless of depth will be included as HMA Surface, Rem, Modified.

Materials

None Specified

Construction Methods

Saw cut, if necessary, remove and dispose of all materials in accordance with the MDOT Standard Specifications for Construction. Contractor may choose to mill the existing HMA surface in lieu of removal.

Method of Measurement

HMA Surface, Rem, Modified will be measured in its original position. Payment for mainline pavement removal shall be based on the overall width minus the 20 foot of mainline Pavt, Rem, Modified or 20 foot of mainline Cold Milling HMA Surface. Payment for pavement removal in driveways will be based upon the field measurements prior to removal.

Basis of Payment

HMA Surface, Rem, Modified will be paid for by the square yard, in place, which price shall be payment in full for all work specified herein.

Pay Item

Pay Unit

HMA Surface, Rem, Modified

Square Yard

SPECIAL PROVISION
FOR
**ACCEPTANCE OF HMA MIXTURE ON LOCAL AGENCY PROJECTS
USING THE ROLLER METHOD**

(NOT ON THE NATIONAL HIGHWAY SYSTEM)

DES/LAP:MWH

1 of 3

07/28/11

a. Description. This special provision provides acceptance testing requirements for use on local agency projects that do not include the QC/QA special provision. The HMA mixture shall be provided to meet the requirements of the standard specifications for construction except where modified herein.

b. Materials. Aggregates, mineral filler (if required), and asphalt binder shall be combined as necessary to produce a mixture proportioned within the master gradation limits shown in the project documents, and meeting the uniformity tolerances listed in Table 1. The master gradation range is to be used for establishing mix design only. Topsoil, clay, or loam shall not be added to aggregates which are to be used in plant mixed HMA mixtures.

c. Construction. After the job-mix-formula is established, the aggregate gradation and the binder content of the HMA mixture furnished for the work shall be maintained within the Range 1 uniformity tolerance limits permitted for the job-mix-formula specified in Table 1. However, if deviations are predominantly either below or above the job-mix-formula, the Engineer may order the contractor to bring the mixture into conformance with the job-mix-formula. If two consecutive aggregate gradations on one sieve, or binder contents as determined by the field tests, are outside Range 1 but within Range 2 tolerance limits, the Contractor shall suspend all operations. Contract time will continue during these times when the plant is down. Before resuming any production, the Contractor shall propose, for the Engineer's approval, all necessary alterations to the materials or plant so that the job-mix-formula can be maintained. The Engineer, after evaluating for effects on AWI and mix design properties, will approve or disapprove such alterations.

Acceptance sampling and testing will be performed by the Engineer using the sampling method and testing option selected by the Engineer. Each day of production, a minimum of two samples will be obtained for each mix type. The minimum of one sample shall be tested per day. Acceptance testing will be performed at the frequency specified by the Engineer. No less than three samples shall be obtained for each mix type. Quality control measures to insure job control are the responsibility of the Contractor. Mixture may be accepted by visual inspection up to 500 tons total mixture quantity, with a minimum of 1 sample per mix type, per job.

The crushed particle content of the aggregate used in the HMA mixture shall not be more than 10 percentage points above or below the crushed particle content used in the job-mix-formula nor less than the minimum specified for the aggregate in the project documents.

Table 1: Uniformity Tolerance Limits for HMA Mixtures

| PARAMETER | TOP & LEVELING COURSE | | BASE COURSE | |
|---------------------------------|-----------------------|---------|-------------|---------|
| | * Range 1 | Range 2 | * Range 1 | Range 2 |
| Binder Content | ± 0.40 | ± 0.50 | ± 0.40 | ± 0.50 |
| % Passing # 8 and Larger Sieves | ± 5.0 | ± 8.0 | ± 7.0 | ± 9.0 |
| % Passing # 30 Sieve | ± 4.0 | ± 6.0 | ± 6.0 | ± 9.0 |
| % Passing # 200 Sieve | ± 1.0 | ± 2.0 | ± 2.0 | ± 3.0 |

*This range allows for normal mixture and testing variations. The mixture shall be proportioned to test as closely as possible to the Job-Mix-Formula.

When the number of roller method is not specified, then the pavement density will be measured by the Engineer with a Nuclear Density Gauge using the Gmm from the Job Mix Formula (JMF) for the density control target. The required in place density of the HMA mixture shall be 92.0 - 96.0% of the density control target. The Contractor is responsible for establishing a rolling pattern that will achieve the required in place density.

- d. Roller Method.** Testing will be at the discretion of the engineer. The Rollers Method shall apply as detailed below.

Number of Rollers Required Based on Placement Rate:

| Average Laydown Rate, Square Yards Per Hour | Number of Rollers Required | |
|---|----------------------------|----------------|
| | Compaction Rollers | Finish Rollers |
| Less than 600 | 1 | *1 |
| 600 - 1200 | 1 | 1 |
| 1200 - 2400 | 2 | 1 |
| 2400 - 3600 | 3 | 1 |
| 3600 and More | 4 | 1 |

*The compaction roller may be used as the finish roller also.

Rolling of the Mixture shall begin as soon after placement as it will bear the roller without undue displacement or cracking. Rolling shall start longitudinally at the extreme sides of the lanes and proceed towards the center of the pavement, overlapping on successive trips by at least half the width of the drum. Each required roller will be 8 tons minimum in weight (or as directed by the engineer). The initial breakdown roller will be capable of vibratory compaction, and in no case will be more than 500' behind the laydown operations. The maximum allowable speed of each roller shall be 3 mph or 4.5'/sec. All compaction rollers will complete a minimum of 2 complete rolling cycles prior to the mat temperature reaching 180 degrees Fahrenheit. Finish rolling shall continue until all roller marks are eliminated and no further compaction is possible. The engineer or representative will verify that the roller pattern has been adhered to and document same on the

daily inspection logs.

e. Construction. The Engineer shall run and document a density frequency curve for each half day of production to determine the roller pattern and number of passes to achieve the maximum density. A density frequency curve is defined as the measurement and documentation of each pass of the finished roller until the in place density results indicate a decrease in value. The previous recording will be deemed the optimal density. The Engineer shall perform density tests using an approved non-nuclear guage (per the manufacturer's recommended procedures) or a nuclear density gauge in the 60 second mode with the JMF Gmm.

f. Rejected Mixtures. If for any one mixture, two consecutive aggregate gradations on one sieve or binder contents as determined by field tests exceed the uniformity tolerance of Range 2 under Table 1, or do not meet the minimum requirements for crushed particle content specified in the project documents, the mixture will be rejected. If such mixtures are placed in a pavement, the remaining portions of the failing field samples (minimum sample size taken shall be 10,000 grams) will be sent to the MDOT Central Laboratory to confirm the field test results. If the Laboratory's results do not confirm the field test results and there are no price adjustments required due to test failures on the asphalt binder, then no price adjustments will be made for the mixture involved. If the Laboratory's results confirm the field test results and if, in the Engineer's judgment, the defective mixture can remain in place and there are no price adjustments required due to test failures on the asphalt binder, the contract unit price for the defective mixture involved, as determined from field tests, will be decreased on the following basis:

The contract unit price for material outside of Range 2 or with a crushed particle content below that specified in the project documents will be decreased 25 percent.

If three consecutive aggregate gradations on one sieve, or bitumen contents as determined by field tests are outside Range 1 but within Range 2 tolerance limits, the mixture produced from the time the third sample was taken until the gradation, or bitumen content is corrected back into Range 1 will be decreased in contract unit price by 10 percent. Field tests indicating that mixtures are subject to the 10 percent penalty will be confirmed in the same manner as mixtures subject to the 25 percent penalty as described herein.

ALLEGAN COUNTY ROAD COMMISSION

SPECIAL PROVISION

FOR

WATER MAIN CONFLICT, RELOCATE

Wightman & Associates, Inc./AJN

01/24/2014

Description

This work shall consist of relocating or lowering portions of the existing 16" water main to resolve utility conflicts in accordance with Section 823 of the Standard Specifications for Construction.

Materials

No change is made to Section 823.02.

Construction Methods

Contractor shall coordinate the shutdown of the water main with the Dorr-Leighton Water Works. Once the main is shutdown, the Contractor shall cut the existing water main to provide sufficient distance to lower the water main to provide a minimum of 18" vertical separation between the two utilities.

The installation of the new water main and fittings shall be completed in accordance with Section 823.03 of the Standard Specifications for Construction. All bends shall be 22.5 degree. All new water main and fittings shall be wrapped in polyethylene.

Measurement and Payment

Water Main Conflict, Relocate will be paid based upon each location where the water main needs to be lowered or relocated. Payment will include all necessary pipe, fittings, polyethylene encasement, excavation, backfill, pressure testing, bacteriological testing, and removal of the existing pipe.

Pay Item

Pay Unit

Water Main Conflict, Relocate

Each

ALLEGAN COUNTY ROAD COMMISSION

SPECIAL PROVISION

FOR

CULVERT FILL, SPECIAL

1 of 1

Wightman & Associates, Inc./AJN

01/24/2014

Description

This work shall consist of furnishing and placing fill material inside of the proposed box culvert to the lines and grades as shown on the plans.

Materials

Fill material shall match the existing material that is located with the existing drainage channel.

Construction Methods

Upon installation of the box culvert sections and prior to removing the de-watering systems, the Contractor shall install the fill material within the box culvert. The material shall be placed inside of the box in lifts not to exceed 10 inches and compacted to a min 90% of maximum unit weight.

Method of Measurement

Culvert Fill, Special will be measured by the length, width, and depth of the finished placed material within the box culvert.

Basis of Payment

Culvert Fill, Special will be paid for by the cubic yard, compacted in place, which price shall be payment in full for all work specified herein.

Pay Item

Pay Unit

Culvert Fill, Special

Cubic Yard

ALLEGAN COUNTY ROAD COMMISSION

SPECIAL PROVISION

FOR

EXPLORATORY INVESTIGATION, MODIFIED

Wightman & Associates, Inc./AJN

01/24/2014

Description

This work consists of providing all labor and equipment necessary to perform exploratory work to locate existing underground utilities (water main, sanitary sewer, gas main, fiber optic, etc.) that may be in conflict with the proposed storm sewer structures or pipe prior to delivery and installation of the materials. This work shall be performed as needed prior to installing the underground utilities at locations designated in this Special Provision and/or the Engineer.

Materials

Excavated material may be used to backfill the trench if approved by the Engineer. If the Engineer determines the excavated material is not acceptable for backfill, furnish and place approved backfill meeting the requirements of Section 205 of the Standard Specifications for Construction.

Construction Methods

The following four (4) locations are identified where this exploratory investigation is requested to properly position the proposed storm sewer, culverts, and structures. These locations are:

Sta 30+62 Lt (force main crossing, telephone/fiber conduits); Sta 43+00 Rt +/- (water main crossing); Sta 44+80 Lt (force main crossing, telephone/fiber conduits); Sta 47+75 Rt +/- (Box Culvert crossing of water main). Additional areas may be identified prior to and/or during construction.

Contact the MISS DIG system a minimum of 3 full working days prior to beginning this work. Excavate down and locate the existing utilities within the vicinity of the proposed utility. Once the existing utility is located, the depth and offset shall be documented and compared to the offsets and elevations of the proposed utilities. Once these measurements have been obtained, the excavation shall be backfilled in accordance with Section 205. The Engineer shall be present during this investigation work.

This pay item will only be used as requested by the Engineer. The Contractor is still responsible for locating all utilities during the construction work in accordance with Section 107.12 of the Standard Specifications for Construction and the Utility Coordination Clause for this project at all other locations.

Measurement and Payment

Exploratory Investigation, Modified shall be based upon the time required to expose the utility, document the depth and location of the utility and temporarily backfill the utility until installation of the new underground infrastructure. This item will only be used as requested by the Engineer. The locating and identifying of all other utilities during construction will not be paid for separately but shall be considered included in the associated items of work.

Pay Item

Pay Unit

Exploratory Investigation, Modified

Hour

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
SLOPE RESTORATION, NON-FREEWAY

C&T:DMG

1 of 3

C&T:APPR:TWK:DBP:04-25-12

a. Description. This work consists of preparing all lawns and slopes on non-freeway projects designated for slope restoration on the plans or as directed by the Engineer and applying topsoil, fertilizer, seed, mulch with mulch anchor, mulch blanket, high velocity mulch blanket and permanent turf reinforcement mat to those areas. Turf establishment must be in accordance with section 816 of the Standard Specifications for Construction and Standard Plan R-100 Series, except as modified herein or otherwise directed by the Engineer.

b. Materials. The materials and application rates specified in sections 816 and 917 of the Standard Specifications for Construction apply unless modified by this special provision or otherwise directed by the Engineer. The following materials must be used on this project:

1. Seeding mixture as called for on the plans
2. Fertilizer, Chemical Nutrient, Class A
3. Topsoil Surface, Furnished or Salvaged, 4 inch. Remove any stones greater than 1/2 inch in diameter or other debris from all topsoil.
4. Mulch and Mulch Anchoring, Mulch Blanket and High Velocity Mulch Blanket
5. Permanent Turf Reinforcement Mat (TRM) must be 100 percent synthetic and consist of 100 percent ultraviolet (UV) stabilized polyolefin fibers sewn between two layers of black UV stabilized polypropylene netting with polyolefin thread. The TRM must meet the following "minimum average roll value" requirements:

| Property | Test Method | Requirement |
|----------------------------------|--------------------|--------------------|
| Mass/Unit Area | ASTM D 6566 | 10 oz/syd |
| Ultraviolet Stability @ 1000 hrs | ASTM D 4355 | 80 percent |
| Tensile Strength (MD) | ASTM D 6818 | 165 lbs/ft |

Acceptance. Supply a Test Data Certification for the permanent TRM from one of the following manufacturers:

Recyclex - American Excelsior Co., Arlington, TX (800) 777-7645
P300 - North American Green, Poseyville, IN (800) 772-2040
Landlok 450 - Propex, Inc., Chattanooga, TN (800) 621-1273
PP5-10 - Western Excelsior, Mancos, CO (800) 833-8573

c. Construction. Construction methods must be in accordance with subsection 816.03 of the Standard Specifications for Construction. Begin this work as soon as possible after final grading of the areas designated for slope restoration but no later than the maximum time frames stated in

subsection 208.03 of the Standard Specifications for Construction. It may be necessary, as directed by the Engineer, to place materials by hand.

Shape, compact and assure all areas to be seeded are weed free prior to placing topsoil. Place topsoil to the minimum depth indicated above, to meet proposed finished grade. If the area being restored requires more than the minimum depth of topsoil to meet finished grade, this additional depth must be filled using topsoil or, at the Contractor's option, embankment. Furnishing and placing this additional material is included in this item of work.

Topsoil must be weed and weed seed free and friable prior to placing seed. Remove any stones greater than 1/2 inch in diameter or other debris. Apply seed mixture and fertilizer to prepared soil surface. Incorporate seed into top 1/2 inch of topsoil

Apply mulch at a rate of 2 tons per acre. Place Mulch Anchoring over the mulch at a rate specified in subsection 816.03.F of the Standard Specifications for Construction. Mulch Blanket and High Velocity Mulch Blanket must be placed in accordance with subsection 816.03.H of the Standard Specifications for Construction and as shown on Standard Plan R-100 Series.

Areas constructed with the TRM must be installed on prepared (seeded) grades as shown on the plans in strict accordance with the manufacturer's published installation guidelines. The top edge of the TRM must be anchored in a minimum 6 inch deep trench. Operation of equipment on the slope will not be allowed after placement of the TRM. No credit for splices, overlaps, tucks or wasted material will be made.

If an area washes out after this work has been properly completed and approved by the Engineer, make the required corrections to prevent future washouts and replace the topsoil, fertilizer, seed and mulch. This replacement will be paid for as additional work using the applicable contract items.

If an area washes out for reasons attributable to the Contractor's activity or failure to take proper precautions, replacement will be at the Contractor's expense.

The Engineer will inspect the seeded turf to ensure the end product is well established, weed free, in a vigorous growing condition, and contains the species called for in the seeding mixture.

If the seeded turf is not well established at the end of the first growing season, the Contractor is responsible to re-seed until the turf is well established and approved by the Engineer.

If weeds are determined by the Engineer to cover more than 10 percent of the total area of slope restoration, the Contractor must provide weed control in accordance with subsection 816.03.J of the Standard Specifications for Construction. Weed control will be at the Contractor's expense with no additional charges to the project.

d. Measurement and Payment. The completed work, as described, will be measured and paid for at the contract unit price using the following pay item:

| Pay Item | Pay Unit |
|-------------------------------|-----------------|
| Slope Restoration, Type _____ | Square Yard |

1. Place **Slope Restoration, Type A** in all areas not described in the other types of slope restoration and will be measured by area in square yards in place. **Slope Restoration, Type A**

includes all labor, equipment and materials required to install Topsoil Surface, Furnished or Salvaged; Fertilizer, Chemical Nutrient, Class A; Seeding Mixture; and Mulch and Mulch Anchoring which will not be paid for separately but is included in the contract unit price for **Slope Restoration, Type A**.

2. Place **Slope Restoration, Type B** parallel (6 feet minimum) to the edge of the roadway, in areas that have a 1 on 3 slope and in any ditch with a grade less than 1.5 percent, or as directed by the Engineer. **Slope Restoration, Type B** will be measured by area in square yards in place. **Slope Restoration, Type B** includes all labor, equipment and materials required to install Topsoil Surface, Furnished or Salvaged; Fertilizer, Chemical Nutrient, Class A; Seeding Mixture; and Mulch Blanket which will not be paid for separately but is included in the contract unit price for **Slope Restoration, Type B**.

3. Place **Slope Restoration, Type C** in areas that have a 1 on 2 slope, any ditch with a grade of 1.5 percent to 3 percent or as directed by the Engineer. **Slope Restoration, Type C** will be measured by area in square yards in place. **Slope Restoration, Type C** includes all labor, equipment and materials required to install Topsoil, Furnished or Salvaged; Fertilizer, Chemical Nutrient, Class A; Seeding Mixture; and High Velocity Mulch Blanket which will not be paid for separately but is included in the contract unit price for **Slope Restoration, Type C**.

4. Place **Slope Restoration, Type D** in areas that have a slope steeper than 1 on 2, any ditch with a grade steeper than 3 percent or as directed by the Engineer. **Slope Restoration, Type D** will be measured by area in square yards in place. **Slope Restoration, Type D** includes all labor, equipment and materials required to install Topsoil, Furnished or Salvaged; Fertilizer, Chemical Nutrient, Class A; Seeding Mixture; and TRM which will not be paid for separately but is included in the contract unit price for **Slope Restoration, Type D**.

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
CONTRACTOR PERFORMANCE EVALUATIONS

C&T:JJG

1 of 2

C&T:APPR:BJO:RRV:06-07-11
FHWA:APPR:06-20-11

a. Description. Project management staff will evaluate the Contractor's performance on this project and the evaluation may be used as a basis for modifying the prequalification ratings of the Contractor. An evaluation may be issued during the course of a project (interim) and will be issued after completion of a project (final). The criteria used for the evaluation will be provided by the Engineer upon written request at the preconstruction meeting or found on the MDOT web site in the Bureau of Highways Instructional Memorandum 2011-01. Any action to modify the Contractor's prequalification ratings will be taken in accordance with the duly promulgated prequalification rules.

If an interim contractor performance evaluation is issued and regardless of whether the Contractor requests a meeting to discuss a Contractor Performance Evaluation, project management staff may require the Contractor to submit a performance improvement plan to address needs identified in the Contractor Performance Evaluation and to attend a meeting to discuss the improvement plan. After the meeting is held, the project management staff may approve the plan or require changes to the plan. Resubmit the plan if changes are required. Immediately implement approved performance improvement plans. If the Contractor does not implement the plan immediately, MDOT will consider the Contractor to be in non-compliance and will take action as described under section c of this special provision.

Within 21 days of the receipt of a Contractor Performance Evaluation, the Contractor may make a written request to meet with project management staff to review the evaluation. As a result of this meeting, the evaluation may be left unchanged or revised as deemed appropriate by the Engineer. The Engineer will then give the Contractor written notice with the final Contractor Performance Evaluation. If the meeting is not requested within the 21-day period, the original evaluation becomes the final and will not be subject to later contest or appeal.

b. Appeals.

1. Appeal of Evaluation. Within 14 days after the date a performance evaluation becomes final and is received by a Contractor, they may file a written appeal of any rating of seven or below to the Engineer. The written appeal must contain documentation supporting the Contractor's position that the rating is not warranted. The appeal will be considered by a Contractor Performance Evaluation Appeal Panel. If no appeal is filed within the 14-day period, the evaluation becomes final and will not be subject to later contest or appeal. Interim Contractor Performance Evaluations cannot be appealed.

2. Appeal of Performance Improvement Plan. Within 14 days after the date that a performance improvement plan is approved and sent to the Contractor, the Contractor may file a written appeal of that plan to the Engineer and request to appear before a Performance Evaluation Appeal Panel. Documentation must include the reasons for the appeal. If a timely written appeal is not filed, the performance improvement plan becomes final and will not be

subject to later contest or appeal.

An appeal filed by a Contractor will be considered by a Contractor Performance Evaluation Appeal Panel. The panel will be composed of three licensed professional Engineers from the Department (following the format of a Central Office Review Panel) who were not directly involved in the management of the project. This panel will review appeals on all Contractor Performance Evaluations for this project. The Contractor and the Engineer will be required to submit supporting documentation relevant to the appeal and will attend a formal appeal hearing. Upon concluding its review, the panel will confirm or modify the Contractor Performance Evaluation. The panel will, within 30 days, send the Contractor and Engineer written notice of its decision along with a copy of the modified Contractor Performance Evaluation if applicable. The original or modified Contractor Performance Evaluation is final and constitutes the Department's decision; it is not subject to further contest or appeal.

c. Non-Compliance. If a Contractor fails to honor a request by project management staff to submit a performance improvement plan or to meet to discuss it, or if a Contractor fails to carry out an approved performance improvement plan, that failure may be used as a basis for modifying the prequalification ratings of the Contractor. Any action to modify the Contractor's prequalification ratings will be taken in accordance with the duly promulgated prequalification rules.

d. Subcontractors. For purposes of this special provision, the word "Contractor" includes subcontractors. Project management staff will evaluate the performance of subcontractors in accordance with this special provision.

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
ELECTRONIC TRANSMITTAL OF CONTRACT DOCUMENTS

CSD:JDM

1 of 1

APPR:JC:DBP:10-26-12
FHWA:APPR:11-08-12

Delete the first sentence in subsection 102.15, on page 22 of the Standard Specifications for Construction, and replace with the following:

The Department will provide the contract and bond forms electronically to the determined low Bidder, using Bid Express. The low Bidder will receive notification of the documents availability at the e-mail address associated with that account. The determined low Bidder will be responsible for printing the contract documents for return to the Department.

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
LOW BID WITHDRAWAL PRIOR TO CONTRACT AWARD

CSD:JDM

1 of 1

APPR:JJG:DBP:07-02-13
FHWA:APPR:07-10-13

Add the following sentence to the end of the last paragraph in subsection 102.17, on page 24 of the Standard Specifications for Construction:

A determined low bidder whose bid is withdrawn prior to contract award cannot participate as a subcontractor, supplier, or trucker on the project.

Add the following sentence to the end of the fifth paragraph in subsection 108.01. on page 72 of the Standard Specifications for Construction:

The Contractor may not hire, a determined low bidder on a project who has withdrawn a bid prior to award, as a subcontractor, supplier, or trucker on the same project.

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
HIGH VISIBILITY CLOTHING

SSA:JDG

1 of 1

C&T:APPR:JAJ:BRZ:01-23-09
FHWA:APPR:06-01-11

Add the following, to the end, of subsection 104.07.B, Safety and Health Requirements, on page 36 of the Standard Specification for Construction:

4. **Worker Visibility.** Effective November 24, 2008, all workers within the right-of-way who are exposed to traffic or to construction equipment within the work area, must wear high visibility clothing.

High visibility clothing or high visibility safety apparel is personal protective safety clothing that is intended to provide conspicuity during both daytime and nighttime usage. High Visibility safety apparel must meet the Performance Class 2 or 3 requirements of the American National Standards Institute/International Safety Equipment Association (ANSI/ISEA) 107-2004 for High-Visibility Safety Apparel and subsequent revisions thereof.

Costs incurred to comply with this requirement will be the responsibility of the Contractor.

This special provision will remain in place until the 2009 Federal Manual on Uniform Traffic Control Devices, Part 6, has been adopted by the State of Michigan.

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
VALUE ENGINEERING CHANGE PROPOSAL (VECP)

C&T:EMB

1 of 4

C&T:APPR:SJP:DBP:03-17-10
FHWA:APPR:06-01-11

a. Description. A Value Engineering Change Proposal (VECP) modifying plans, specifications, or other contract requirements may be submitted for this project if the proposed change results in reduced construction cost, a higher quality product, improved safety, or a shorter contract time. The estimated cost savings must be quantifiable in relation to the contract cost. No work can begin before written authorization. The proposed change must not alter the essential functions or characteristics of the project or significantly delay the completion of the project. A VECP or conceptual VECP will only be considered after project award. Essential functions and characteristics include, but are not limited to, service life, operating costs, ease of maintenance, desired appearance, impact on utilities and right of way, mobility and safety of the motorist, bicyclist and pedestrian; design standards, and safety standards. This specification does not restrict the Contractor from proposing improvements to the project that may not result in net cost savings. A conceptual VECP stating the basic concept and approximate cost savings may be submitted for preliminary consideration.

b. Submittal of Conceptual VECP. Submit a Conceptual Proposal for the preliminary evaluation. Upon review by the Engineer, one of the following actions will be taken:

- Conceptual approval and a request for the Contractor to submit a formal VECP.
- Request for additional information.
- Denial of the VECP.

Preliminary review of a conceptual proposal reduces the Contractor risk of subsequent denial but does not commit the Department to eventual approval of the full VECP. Submit five copies of the following information for each Conceptual VECP using the Value Engineering Change Proposal Form (Form # 1962) marked Conceptual VECP.

1. A description of the difference between the existing contract items and the proposed changes, and expected benefits.
2. A set of conceptual plans and a description of proposed changes to the contract items.
3. An estimate of the anticipated cost savings or increase.
4. A date by which the Department must make a decision to avoid delays to the existing contract and obtain the cost savings. Also include information on the amount of time necessary to develop the full proposal and impacts to the progress schedule.
5. If impacting maintenance of traffic provisions, identify proposed changes and impacts to the Special Provision for Maintaining Traffic.

After approval of conceptual VECP, the Contractor must follow section c for the Final VECP.

c. Submittal of Final VECP. Submit five copies of the following information for each VECP using Value Engineering Change Proposal Form (Form # 1962) marked Final VECP.

1. A description of the difference between the existing contract and the proposed change, and the advantages and disadvantages of each, including effects on service life, operating costs, ease of maintenance, desired appearance, impact on utilities and right of way, mobility and safety of the motorist, bicyclist and pedestrian; design standards, and safety standards.

2. A complete set of plans, if necessary, and specifications showing the revisions relative to the original contract. This portion of the submittal must include design notes and construction details. If the proposal has plans, these must be signed and sealed by the Contractor's Professional Engineer licensed in the State of Michigan.

3. All costs and proposed unit prices must be documented by the Contractor and must include a cost comparison summarizing all the items the VECP replaces, reduces, eliminates, adds, or otherwise changes from the original contract on a spreadsheet.

4. A date by which the Department must make a decision to avoid delays to the existing contract and to obtain the proposed cost savings.

5. If impacting maintenance of traffic provisions, identify proposed changes and impacts to the Special Provision for Maintaining Traffic. If the submitted revisions to the maintaining traffic provision are approved and require any corrections, the Contractor is responsible for all additional costs related to corrective measures.

6. A statement detailing the affect the proposal will have on the time for completing the contract and impacts to the critical path and progress schedule.

7. A description of any known uses or testing of the proposed changes and the conditions and the results.

8. If the VECP submittal includes pay items associated with a warranty, include the latest version of the warranty specification.

d. Evaluation. By submitting the VECP, the Contractor agrees not to hold the Department liable for its decision or for any delays to the work attributable to the VECP. Decisions on VECP are not subject to appeal. Work on the project will continue in accordance with the requirements of the contract until a work order is issued which incorporates the VECP changes. The Department has final authority of the acceptability of a VECP and of the estimated net savings attributable to the adoption of all or any part of the VECP. If, in the judgment of the Engineer, contract prices do not represent a fair measure of the value of work to be performed or to be deleted, the Engineer will be use other means to determine the estimated net savings.

The Department may modify a VECP, with the concurrence of the Contractor, in order to make it acceptable. The Contractor's share of the savings will be based on the modified VECP.

If the VECP is accepted, in whole or in part, the written acceptance will be issued by a work order and followed with a contract modification. The work order and contract modification will include the necessary changes in the plans and specifications and any conditions upon which the approval is based. Acceptance of the VECP will not extend the time of contract completion unless specifically provided for in the work order and contract modification.

VECP will be evaluated in accordance with the following:

1. The Engineer will determine if a VECP qualifies for consideration and evaluation. The Engineer may deny any VECP that requires excessive time or costs for review, evaluation or investigation. The Engineer may deny any VECP that is not consistent with the Department's design policies and criteria for the project.

2. The Department will not accept a VECP that is similar to a change in the plans or specifications under consideration by the Department for the project at the time the proposal is submitted; nor will the Department accept a proposal based upon, or similar to, standard specifications, general use special provisions or standard drawings adopted by the Department after the advertisement for the contract. The Department reserves the right to make such changes without compensation to the Contractor under the provisions of subsection 103.02 of the Standard Specifications for Construction.

3. The Contractor will have no claim against the Department for additional costs or delays resulting from denial or untimely acceptance of a VECP. These costs include but are not limited to: development costs, loss of anticipated profits, increased material or labor costs, or untimely response.

4. A VECP will be denied if equivalent options are already provided in the contract.

5. A saving resulting solely from the elimination or reduction in quantity of a contract pay item will not be considered as a VECP. A saving resulting from the elimination or reduction in quantity of a contract item specified as part of a VECP may be considered.

6. In calculating the value of cost savings, the Department has the right to disregard the Contract bid prices, if such prices do not represent the value of the work to be performed or to be deleted, and has the right to calculate the savings based on reasonable cost for such work.

7. A VECP cannot be used to alter incentive and disincentive rates and maximum payments on A + B and/or lane rental projects.

8. A VECP will be denied if the design consultant for the contractor is also the design consultant for the Department or other apparent conflicts of interest exist.

e. Time Frame for VECP Evaluation. The Contractor will be notified of the Department's decision to approve or deny a conceptual or final VECP within 14 calendar days of receipt of the VECP. If a written acceptance has not been received within this time frame, and the date has not been extended by mutual agreement of both parties, the VECP is denied. The Department's decision is final and there is no appeal.

f. Future Use of VECP. The Department reserves the right to use all or any part of a VECP on other contracts without obligation or compensation to the Contractor. If the VECP is

accepted, the Department may use or disclose any information necessary to incorporate the VECP on future projects.

g. Payment for Work under the VECP. The Engineer may reject all or any portion of work performed under an approved VECP if results are unsatisfactory. The Engineer will direct the removal of rejected work and construction will proceed under the original contract requirements. There will be no payment for work performed under the proposal, or for its removal.

No work related to a VECP will be performed under force account. Agreed prices must be reached for any new or modified contract pay items related to the VECP before the VECP is approved.

The changes will be incorporated into the Contract by changes in quantities of unit bid items, new agreed unit price items, lump sum or any combination, as appropriate, under the Contract. Unless there is a differing site condition as described in subsection 103.02 of the Standard Specifications for Construction, the Contractor will not receive additional compensation for quantity overruns, design errors, supplemental surveys, geotechnical investigations, additional items or other increases in cost that were not foreseen in the accepted VECP, unless otherwise approved by the Engineer.

The work order and authorization will include the price for performing all affected items of work and the estimated net savings in the cost of performing the work directly attributable to the VECP. VECP payments only involve direct savings or costs. Indirect savings or costs (time, user delay, contract delay, etc) are not included in VECP payment calculations. The calculations of VECP payments are independent from the payments or penalties for contract time related issues. The Contractor will be paid 50 percent of this net savings based on as constructed or plan quantities whichever is in the best interests of the Department. The amount specified in the work order and authorization constitutes full compensation to the Contractor for the VECP and the performance of that work.

$$(\text{Cost of Deleted Work}) - (\text{Cost of Added Work}) = \text{Net Savings}$$

$$\text{Payment} = (\text{Net Savings})/2$$

Note: Approved VECP's will be paid using the pay item code "1200000", item description of "Value Engineering" and the pay unit is "Dollar" for the contract modification.

The Contractor's development costs for the proposed VECP, including all costs associated with design, are not reimbursable.

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
SOURCE OF STEEL AND IRON (BUY AMERICA)

CFS:JJG

1 of 3

APPR:RJC:DBP:01-08-13
FHWA:APPR:01-08-13

Delete subsection 105.10, on page 53 of the 2012 Standard Specifications for Construction, in its entirety and replace with the following:

105.10. Source of Steel and Iron. Provide steel and iron materials and products for permanent incorporation into the work that were produced only in the United States per Title 23 of the Federal Code of Regulations (CFR) Section 635.410, Buy America Requirements.

All steel and iron products and manufacturing processes of the steel and iron material in a product, including but not limited to the following steps; smelting, melting, rolling, extruding, machining, bending, grinding, drilling, welding, galvanizing, and coating, must occur within the United States.

Examples of products that are subject to Buy America coverage include, but are not limited to, the following:

- A. Steel or iron products used in pavements, bridges, tunnels or other structures, which include, but are not limited to, the following: fabricated structural steel, reinforcing steel, piling, high strength bolts, anchor bolts, dowel bars, permanently incorporated sheet piling, bridge bearings, cable wire/strand, pre-stressing/post-tensioning wire, motor/machinery brakes and other equipment for moveable structures.
- B. Guardrail, guardrail posts, end sections, terminals, cable guardrail.
- C. Steel fencing material, fence posts.
- D. Steel or iron pipe, conduit, grates, manhole covers, risers.
- E. Mast arms, poles, standards, trusses, supporting structural members for signs, luminaires, or traffic control systems.
- F. Steel or iron components of precast concrete products, such as reinforcing steel, wire mesh and pre-stressing or post-tensioning strands or cables.

The miscellaneous steel or iron components, subcomponents and hardware necessary to encase, assemble and construct the above components (or manufactured products that are not predominantly (90 percent) steel or iron) are not subject to Buy America coverage. Examples include, but are not limited to, cabinets, covers, shelves, clamps, fittings, sleeves, washers, bolts, nuts, screws, tie wire, spacers, chairs, lifting hooks, faucets, door hinges, etc.

Provide step certification for all steel and iron related pay items, materials, products, and components as specified on the Department website. The Department will maintain a list of these pay items, materials, products, and/or components on the following website.

http://www.michigan.gov/mdot/0,1607,7-151-9622_11044_11367---,00.html

Step certification is defined as the certification by the respective manufacturer or fabricator for their specific process (step) that the product, material, or component was fabricated, manufactured, and/or processed in the United States. The step certification documentation for these pre-defined pay items, materials, products, and/or components is to be submitted to the Engineer in a package covering each step prior to delivery or concurrent with material delivery on-site. Approved certification is required prior to incorporation of the materials into the project.

Buy America certification documentation for products and materials designated as fully compliant with the Buy America requirements on the Qualified Products List (QPL), Approved Manufacturers, and Tested Stock Suppliers Lists will be maintained by the MDOT Construction Field Services (CFS) Division. Buy America certification for these fully compliant items does not need to be submitted by the Contractor, but a bill of lading, product label, or shipping record to document that the products are from the respective source is to be provided to the Engineer. Buy America certification documentation for items that are partially compliant will be required to be submitted prior to delivery or concurrent with material delivery and prior to incorporation, noting the value of foreign steel/iron. The use of the Department maintained Buy America lists and notations does not relieve the Contractor from responsibility of ensuring Buy America compliance. The Contractor is ultimately responsible for Buy America compliance.

The Buy America lists maintained by the Department are solely for the benefit of the Department and may not be relied upon by the Contractor. The Contractor is solely responsible for the Buy America requirements for steel and iron as set forth in the CFR.

The above requirements do not preclude a minimal use of foreign steel and iron, provided the total invoice cost of foreign material permanently incorporated into the project does not exceed 0.1 percent of the total contract amount or \$2,500 whichever is greater. The Department defines the total invoice cost as the total value of the foreign steel and iron materials delivered to the project. The Department defines the total contract amount to be the total of the contract unit prices for items of road work and bridge work, any adjustments as provided for in the contract, and any assessment of incentive, disincentive or liquidated damages as provided for in the contract.

MDOT/Consultant fabrication facility inspectors are not responsible for approving the incorporation of foreign steel/iron prior to fabrication. It is the responsibility of the fabricator to notify and coordinate with the Contractor for all potential inclusion of foreign steel/iron in fabricated products.

For each item subject to meeting Buy America requirements the following documentation must be provided by the Contractor to verify this value and placed in the project files to ensure that the threshold is not exceeded:

- Pay Item,
- Description of associated foreign steel/iron material, product, or component,
- Cost of associated foreign steel/iron material, product or component, and
- Cumulative list of all non-compliant Buy America items with the total dollar amount.

The minimal use of foreign steel/iron under the minimal usage amount will be approved by the Engineer. The use of foreign steel/iron under the minimal usage amount does not need to be approved by the FHWA. This amount is not considered a waiver to the Buy America requirements. The Contractor must ensure that the minimal usage amount is not exceeded.

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
CONSTRUCTION STAGING AREAS

DES:LFS

1 of 1

C&T:APPR:JJG:KAS:10-06-11
FHWA:APPR:10-11-11

Add the following subsection to section 107, on page 70 of the 2012 Standard Specifications for Construction:

107.22 Construction Staging Areas. The contractor must not use any public recreation area as a staging area, marshalling yard, storage facility, or for any other construction support unless it is defined in the contract.

Public recreation areas include: parks, trails, game areas, wildlife and waterfowl refuges, playgrounds, golf courses, athletic fields or similar areas which are publically owned by public school districts, local, state, or federal governments.

Any agreements negotiated between the Contractor and the owner of the public recreation area, before or after the award of the contract will not be considered valid by the Department.

If the Engineer determines the Contractor is in non-compliance with this subsection, penalties up to and including termination of the contract, in accordance with subsection 108.12, may be enacted as well as the immediate restoration of the public recreation area at the Contractor's cost.

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
E-VERIFY

CSD:JDM

1 of 1

APPR:JJG:JC:10-24-12
FHWA:APPR:10-25-12

a. Description. E-Verify is an Internet-based system that allows an employer, using information reported on an employee's Form I-9, Employment Eligibility Verification, to determine the eligibility of that employee to work in the United States. There is no charge to employers to use E-Verify. The E-Verify system is operated by the Department of Homeland Security (DHS) in partnership with the Social Security Administration. E-Verify is available in Spanish.

The State of Michigan is requiring all Contractors, and Subcontractors, to verify that new employees are legally present and authorized to work in the United States, using the E-Verify System.

Information on registration for and use of the E-Verify program can be obtained via the Internet at the DHS Web site: <http://www.dhs.gov/E-Verify>.

It is the responsibility of the Contractor to include this specification in all tiers of subcontracts.

Verification of the Contractors' use of E-verify will be a part of the random review of subcontract information performed by Contract Services Division.

The required use of the E-Verify system will not be paid for separately as part of the contract but is considered included in the costs for other pay items in the contract.

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
ON-THE-JOB TRAINING PROGRAM

OBD:TDB

1 of 1

C&T:APPR:DBP:GCT:04-21-11
FHWA:APPR:06-01-11

a. Description. The On-The-Job Training (OJT) program is the MDOT's program to meet the requirements of the Federal-Aid Highway Act of 1970 and 23 CFR (Code of Federal Regulations) Part 230, Subpart A. The objective is to develop skill improvement programs to provide opportunities for unskilled workers, particularly minorities, women, and disadvantaged persons, to acquire training in the skilled construction trades.

b. Trainee Assignment. MDOT's Office of Business Development will allocate training assignments to prequalified Contractors based on the past contract volume of federal-aid work performed with MDOT. MDOT will notify each Contractor who has met the volume of work threshold at the beginning of each calendar year and advise them of the number of trainees they are expected to support.

c. Program Requirements. Contractors found to have reached the level(s), as identified in the MDOT OJT program document, are required to fulfill all of the requirements of the OJT program at no additional cost to the Department.

The Contractors are required to pay the trainees in accordance with the following schedule:

- 60 percent of the appropriate minimum journeyman's rate specified in the contract for the first half of the training period
- 75 percent for the third quarter of the training period
- 90 percent for the last quarter of the training period
- Full fringe benefits will be paid during the entire training period

The OJT program document is available through the MDOT's On-the-Job Training Program website at www.michigan.gov/mdot/0,1607,7-151-9625-214452--,00.html.

Contractors should notify the Engineer at the preconstruction meeting if they intend to utilize trainees on the project.

d. Non-Compliance. Failure to comply with the OJT program provisions or complete a training assignment may result in the Contractor being found in non-compliance. Failure to resolve the non-compliance may be used as a basis for modifying the prequalification ratings of the Contractor. Any action to modify the Contractor's prequalification ratings will be taken in accordance with the duly promulgated prequalification rules.

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
PROMPT PAYMENT

CFS:JJG

1 of 4

APPR:JDM:DBP:07-29-13
FHWA:APPR:08-06-13

Add the following subsection to section 109, on page 106, of the Standard Specifications for Construction:

109.08 Prompt Payment.

A. Definitions.

Lower-tier subcontract. An agreement between a subcontractor of any tier and any individual or legal entity to perform a part of the subcontract work.

Lower-tier subcontractor. The individual or legal entity that performs part of the subcontract work through a lower-tier subcontract with a subcontractor.

Supplier. The individual or legal entity that agrees to provide materials or services to the prime Contractor, a subcontractor, or a lower-tier subcontractor for the performance of their contract work.

Sworn Statement. A written verification under oath reflecting all persons or entities, which have furnished labor, equipment, services or materials to a subcontractor or lower-tier subcontractor for performance of work on the project. The written verification includes union fringe benefit funds, original contract amount, current amount due, amounts paid to date and balance to finish the work for each person or entity.

Waiver of Lien. A written release and waiver of any claim or right to payment for payments actually received for labor, equipment, services or materials furnished for performance of work on the project.

The sworn statement and waiver of lien documents are used by the prime Contractor and its subcontractors for verifying payments made to lower-tier subcontractors/suppliers and are not to be submitted to the Engineer unless requested as an aid in determining an alleged prompt payment violation. These documents can be found at the following website under the Construction Field Services heading:

http://www.michigan.gov/mdot/0,1607,7-151-9622_11044_11367---,00.html

B. Progress Payments. For the first payment, or for a one time payment, the prime Contractor agrees to pay each subcontractor for the work associated with their subcontract no later than 10 calendar days from the date the prime Contractor receives payment from the Department.

For the second and subsequent payments, the prime Contractor agrees to pay each

subcontractor for the work associated with their subcontract no later than 10 calendar days from the date the prime Contractor receives payment from the Department.

The Contractor is required to provide payment information for previous payments made to subcontractors and suppliers before the Engineer will release the third and subsequent estimates. The payment information is provided through submittal of the information via the 2124A reporting system (MERS). System information can be found at the following web link.

http://www.michigan.gov/documents/mdot/Prompt_Payment_2124A_Instructions_MERS_366314_7.pdf

The prime Contractor must bring any concerns about the satisfactory completion of subcontractor or lower-tier subcontractor work items, to the Engineer's attention as soon as the concern is discovered. If the work meets the requirements of satisfactory completion and the prime Contractor has been paid for that work, the Engineer must determine whether:

1. The prime Contractor has demonstrated a valid reason for withholding payment from the subcontractor or supplier, or
2. The subcontractor has demonstrated a valid reason for withholding payment from the lower-tier subcontractor or supplier.

If the Engineer determines the reason for withholding payment is valid, the Engineer will process a negative estimate to withdraw the amount involved in the complaint. If payment has not been made for the work related to the complaint, the Engineer will not include those items of work on an estimate until the issue has been resolved.

The prime Contractor remains responsible to make prompt payments on this project to their subcontractors and suppliers except as noted in subsection 109.08.D of this special provision, even if the prime Contractor is in violation of other contractual obligations and the Department is withholding payment from the prime Contractor for those violations.

The prime Contractor must include language in all subcontracts that the Department prohibits prime Contractors from holding retainage from subcontractors. All provisions of this prompt payment subsection apply to all subcontracts, lower-tier subcontracts, and supplier agreements and must be included in each subcontract for the contract, including all lower-tier subcontracts and agreements.

This prompt payment provision is a requirement of 49 CFR 26.29 and does not confer third-party beneficiary rights or other direct rights to a subcontractor against the Department. This provision applies to both DBE and non-DBE subcontractors/suppliers at all tiers.

C. Satisfactory Completion. Progress and partial payments for contract work are issued based on the satisfactory completion of work. Satisfactory completion, for purposes of this prompt payment provision, is defined as:

1. Upon preliminary review, the Engineer finds the work completed in accordance with the contract, plans, and specifications; and,
2. Required documentation, including material certifications, payrolls, submission of 2124A, etc., has been received and reviewed and found to be acceptable by the Engineer; and,

3. Required subcontractor sworn statements and waivers of lien have been provided to the prime Contractor. The prime Contractor must provide notice to the Engineer if sworn statements and waivers of lien have not been received for completed work.

The Engineer will determine if the work meets the standards of satisfactory completion.

D. **Less than full payment release.** The Engineer may give written approval to:

1. Delay or postpone payment from the time frames specified herein,
2. Process partial payment from the prime Contractor to a subcontractor or supplier,
3. Process partial payment from a subcontractor to a lower-tier subcontractor or supplier.

The unpaid portion will be held by the Department.

The parties may initiate whatever dispute resolution procedure is specified in their agreement or is available under Michigan law. If dispute resolution or litigation is selected, the actions by both parties must proceed in a timely manner. The result of the dispute resolution proceeding or litigation must be provided to the Engineer promptly upon the conclusion of the proceeding. The Engineer will release the disputed payment being held by the Department in accordance with the outcome of the proceedings.

E. **Non-Payment Claims.** The prime Contractor, subcontractor, lower-tier subcontractor or supplier must notify the alleged offending party in writing of any prompt payment violations within 30 calendar days of the date the payment was to be received. Copies of the notifications must be provided to the Engineer and the prime Contractor (only if the prime Contractor is not the offending party).

The alleged offending party must respond in writing to the claimant within 10 calendar days of receipt of the notification of failure to meet prompt payment provisions. Copies of the response must be provided to the Engineer, the prime Contractor (only if the prime Contractor is not the offending party), and the Engineer of Construction Field Services. The prime Contractor, subcontractor, or supplier must also provide the required sworn statements and waivers of lien from the affected subcontractor or supplier to the Engineer within 10 days of receipt of the notification. The Department will consider the failure of the alleged offending party to respond to the notification from the claimant as an admission of the prompt pay violation which may result in sanctions.

The Engineer will review the written notice and response and will verify in writing if there is a valid prompt pay violation.

Independent of all procedures and requirements in this special provision the non-payment claimant has the additional option of submitting a lien claim to the MDOT Contract Services Division. MDOT will notify the project surety of the non-payment issue. It is the responsibility of the surety to ensure that all legitimately due payments are made. The submission of a lien claim will not nullify or affect any other requirements, obligations or procedures in this special provision.

F. **Remedies.** When the Engineer verifies a prompt payment violation, the prime Contractor within 5 days must propose one or a combination of any of the following actions items for review

and approval by the Engineer:

1. Issue payment to the subcontractor.
2. Issue payments to a subcontractor in the form of joint checks to the subcontractor and the subcontractor's lower-tier subcontractors and/or suppliers.
3. Issue payment directly to the subcontractor's lower-tier subcontractors or suppliers.
4. Request a negative estimate to withdraw the amount confirmed in the prompt payment violation.

If the prime Contractor fails to submit a timely remedy request or obtain an approved course of action within the 5 day time period, the Engineer will direct a course of action or issue a negative estimate to withdraw the amount confirmed in the prompt payment violation.

If the prime Contractor fails to fulfill the approved or directed course of action the Engineer will impose sanctions until such time as the approved or directed course of action is completed.

Any payments to a subcontractor's lower-tier subcontractor or supplier will be issued in the amounts reflected upon the subcontractor's sworn statements or in amounts independently verified by the Engineer as being due the subcontractor's lower-tier subcontractors and suppliers for work completed. Payments to a lower-tier subcontractor or supplier will be considered payment to the subcontractor directly so that payment for the same work cannot be claimed.

Any other use of joint checks must follow current Department procedures.

G. Sanctions. Failure to comply with any of the prompt payment requirements by the prime Contractor, subcontractor, lower-tier subcontractor, or supplier may result in sanctions against the offending party. These sanctions may include, but are not limited to: withholding of estimates on projects where prompt payment violations are confirmed; reduction or removal of prequalification; and/or suspension of bidding privileges.

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
**NON-COMPLIANCE WITH SOIL EROSION AND SEDIMENTATION CONTROL
REQUIREMENTS**

C&T:DMG

1 of 2

C&T:APPR:JAR:TWK:08-02-06
FHWA:APPR:05-23-11

a. Description. This special provision establishes negative adjustments related to the failure to properly install and maintain soil erosion and sedimentation control (SESC) measures and the conditions under which these adjustments will be determined and applied. Nothing in this special provision modifies section 107 of the Standard Specifications for Construction.

Delays to the project as a result of the Contractor conducting corrective actions for SESC measures do not constitute a valid reason for an extension of time.

Deficiencies with SESC measures must be corrected in the time frame stated herein. For those deficiencies not corrected within the stated time frame, the Engineer will make a negative adjustment to the contract as stated herein.

b. Materials. None specified.

c. Construction. Install all temporary erosion control measures identified on the plans and as directed by the Engineer for an impacted area of the project prior to the start of any earth disturbance including, but not limited to, clearing, grading and excavation in that area. The Engineer will inspect these measures every 7 days and within 24 hours of precipitation events which result in off-site runoff. Deficiencies will be documented on the National Pollutant Discharge Elimination System (NPDES) Inspection Report (Form 1126).

If at any time during the project, including the time during the seasonal suspension, the Engineer documents deficient SESC measures, the Engineer will provide written notification with instructions for corrective action to the Contractor. The time frame for completion of these corrective actions will be specified in the notification and will be discussed with the Contractor as necessary.

Deficiencies are defined as one or more of the following:

1. Failure to install or construct SESC measures shown on the plans or as directed by the Engineer;
2. Failure to maintain the measures;
3. Failure to conduct earth change activities in a manner consistent with all applicable environmental permit requirements;
4. Failure to comply with the time limitations or the area limitations stated in subsections 208.03.B and 208.03.C, respectively, of the Standard Specifications for Construction.

SESC deficiencies are either emergency or non-emergency and the time frame for corrective action is determined accordingly. Sedimentation of a drainage structure or waters of the state or loss of support of the roadbed impacting public safety constitutes an emergency and corrective actions must be completed within 24 hours of notification. Non-emergency deficiencies must be corrected within 5 calendar days of notification.

For those emergency corrective actions not completed within 24 hours of notification, the Contractor will be assessed \$100.00 per hour for every hour the deficiency remains uncorrected after the initial 24 hours of notification. For those non-emergency corrective actions not completed within 5 calendar days, the Contractor will be assessed \$500.00 per day for every day, or part thereof, the deficiency remains uncorrected after the initial 5 days of notification.

If it is not practicable to complete the non-emergency corrective actions within 5 calendar days, the Contractor must document the reasons and propose a corrective action plan to the Engineer within 5 days of notification. The corrective action plan must contain the Contractor's course of action and a time frame for completion. If the reasons and the corrective action plan are acceptable to the Engineer, the Contractor will be allowed to proceed with the plan as proposed without incurring a negative adjustment. If the approved corrective action plan is not completed as proposed, the Contractor will be assessed \$1000.00 per calendar day for every day, or part thereof, the deficiency remains uncorrected after the time frame is exceeded in the approved corrective action plan.

Correct, in the timeframe stated herein, all other emergency or non-emergency SESC deficiencies documented anywhere else on the project during completion of the approved corrective action plan.

d. Measurement and Payment. The Engineer will make the necessary monetary adjustment to the contract amount based on the length of time the Contractor allows the deficiencies to remain uncorrected after the time allowance stated herein and as described to cover any costs incurred by the Department as a result of SESC violations

All costs associated with corrective actions required due to the Contractor's failure to properly install or maintain SESC measures on this project will be borne by the Contractor.

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
AGGREGATE BASE COURSE

C&T:JAR

1 of 1

C&T:APPR:JAR:ACR:06-26-03
FHWA:APPR:04-19-11

a. Description. This provision modifies the layer thickness requirements for placing and compacting aggregate base course. Delete the 6-inch maximum layer restriction in section 302 of the Standard Specifications for Construction and replace with the following:

Construct a test strip at the start of base work. Compact all layers to a uniform depth of not more than 10 inches ($\pm 3/4$ inch). If the total plan base thickness exceeds 10 inches, construct the base in layers of equal thickness. Secure the Engineer's approval for the method of placement and compaction before continuing.

If the accepted method is subsequently modified, the Engineer may require another test strip to confirm compliance with the specification. The Engineer may remove a portion of a layer when conducting density testing to assure the compaction requirements are being met full-depth.

b. Measurement and Payment. All additional costs associated with constructing aggregate base course according to this special provision will be included in the related Aggregate Base pay item.

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
SAMPLING ASPHALT BINDER ON LOCAL AGENCY PROJECTS

C&T:MF

1 of 1

C&T:APPR:JAR:JTL:12-19-01
FHWA:CON. APPR:06-06-11

For informational purposes, original samples of asphalt binder will be taken by the Contractor and delivered to the Engineer prior to incorporation into the mixture. The frequency of sampling shall be determined by the Engineer. The cost of obtaining and delivering the samples to the Engineer will be included in the hot mix asphalt (HMA) pay items.

The Contractor must certify in writing that the materials used in the HMA mixture are from the same source as the materials used in developing the HMA mixture design and the bond coat is from an approved supplier as stated in MDOT's Material Quality Assurance Procedures Manual.

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
RECYCLED HOT MIX ASPHALT MIXTURE ON LOCAL AGENCY PROJECTS

CFS:KPK

1 of 1

APPR:JWB:CJB:11-06-13
FHWA:APPR:11-06-13

Add the following subsection to subsection 501.02.A.2, on page 234 of the Standard Specifications for Construction.

- c. **Reclaimed Asphalt Pavement (RAP) and Binder Grade Selection.** The method for determining the binder grade in HMA mixtures incorporating RAP is divided into three categories designated Tier 1, Tier 2 and Tier 3. Each tier has a range of percentages that represent the contribution of the RAP binder toward the total binder, by weight. The tiers identified below apply to HMA mixtures.

Recycled materials may be used as a substitute for a portion of the new materials required to produce HMA mixtures in accordance with contract.

- **Tier 1 (0% to 17% RAP binder by weight of the total binder in the mixture).** No binder grade adjustment is made to compensate for the stiffness of the asphalt binder in RAP.
- **Tier 2 (18% to 27% RAP binder by weight of the total binder in the mixture).** For all mixtures no binder grade change will occur in Tier 2 for all shoulder and temporary road mixtures.

The required asphalt binder grade must be at least one grade lower for the low temperature than the design binder grade required for the specified project mixture type. Lowering the high temperature of the binder one grade is optional. For example, if the design binder grade for the mixture type is PG 58-22, the required grade for the binder in the HMA mixture containing RAP would be a PG 52-28 or a PG 58-28.

The asphalt binder grade can also be selected using a blending chart for high and low temperatures. The Contractor must supply the blending chart and the RAP test data used in determining the binder selection according to *AASHTO M 323*.

- **Tier 3 (\geq 28% RAP binder by weight of the total binder in the mixture).** The binder grade for the asphalt binder is selected using a blending chart for high and low temperatures per *AASHTO M 323*. The Contractor must supply the blending chart and the RAP test data used in determining the binder selection.

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
MARSHALL HOT MIX ASPHALT MIXTURE

C&T:JWB

1 of 2

C&T:APPR:EHR:CJB:09-25-06
FHWA:APPR:06-06-11

a. Description. Furnish hot mix asphalt (HMA) mixture, designed using Marshall Mixture Design Methods, in accordance with the standard specifications except as modified by this special provision.

b. Mix Design. Submit the mix design for evaluation in accordance with the Department's HMA Production Manual. Use a 50 blow Marshall hammer when compacting mixtures for developing Marshall mix designs.

c. Recycled Mixtures. Substituting reclaimed asphalt pavement (RAP) for a portion of the new material required to produce HMA mixture is allowed provided that the mixture is designed and produced to meet all criteria specified herein, unless otherwise prohibited. RAP materials must be in accordance with the standard specifications.

d. Materials. Table 1 provides the mix design criteria and volumetric properties. Table 2 provides the required aggregate properties. Use aggregates of the highest quality available to meet the minimum specifications. Use the mixture designation number shown in the contract item name when determining mix design properties from Tables 1 and 2.

e. Measurement and Payment. The completed work, as described, will be measured and paid for at the contract unit price using the following pay item:

| Pay Item | Pay Unit |
|-------------------|----------|
| HMA, (type) | Ton |

Table 1: Mix Design Criteria and Volumetric Properties

| | Mixture No. | | | | |
|---------------------------------|-------------|-------|-------|-------|-------|
| | 2C | 3C | 4C | 13A | 36A |
| Target Air Void, % (a) | 3.00 | 4.00 | 4.00 | 4.00 | 4.00 |
| VMA (min) (b) | 11.00 | 13.00 | 14.00 | 14.00 | 15.00 |
| VFA | 65-78 | 65-78 | 65-78 | 65-78 | 65-78 |
| Fines to Binder Ratio (max) (c) | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 |
| Flow (0.01 inch) | 8 -16 | 8 -16 | 8 -16 | 8 -16 | 8 -16 |
| Stability (min), lbs | 1200 | 1200 | 1200 | 900 | 900 |

- a. Lower target air voids by 1.00% if used in a separate shoulder paving operation. Consider reducing air void targets to 3.00% for lower traffic volume roadways when designing 13A and 36A mixtures for local agency use.
- b. VMA calculated using Gsb of the combined aggregates.
- c. Ratio of the weight of aggregate passing the No. 200 sieve to total asphalt binder content by weight; including fines and binder contributed by RAP.

Table 2: Aggregate Properties

| | Mixture No. | | | | |
|--|---|---------|---------|-------|--------|
| | 2C | 3C | 4C | 13A | 36A |
| | Percent Passing Indicated Sieve or Property Limit | | | | |
| 1 1/2 inch | 100 | | | | |
| 1 inch | 91-100 | 100 | | | |
| 3/4 inch | 90 max. | 91-100 | 100 | 100 | |
| 1/2 inch | 78 max. | 90 max. | 91-100 | 75-95 | 100 |
| 3/8 inch | 70 max. | 77 max. | 90 max. | 60-90 | 92-100 |
| No. 4 | 52 max. | 57 max. | 67 max. | 45-80 | 65-90 |
| No. 8 | 15-40 | 15-45 | 15-52 | 30-65 | 55-75 |
| No. 16 | 30 max. | 33 max. | 37 max. | 20-50 | |
| No. 30 | 22 max. | 25 max. | 27 max. | 15-40 | 25-45 |
| No. 50 | 17 max. | 19 max. | 20 max. | 10-25 | |
| No. 100 | 15 max. | 15 max. | 15 max. | 5-15 | |
| No. 200 | 3-6 | 3-6 | 3-6 | 3-6 | 3-10 |
| Crushed (min), % (MTM 117) | 90 | 90 | 90 | 25 | 60 |
| Soft Particle (max), % (a) | 12.0 | 12.0 | 8.0 | 8.0 | 8.0 |
| Angularity Index (min) (b) | 4.0 | 4.0 | 4.0 | 2.5 | 3.0 |
| L.A. Abrasion (max), % loss (c) | 40 | 40 | 40 | 40 | 40 |
| Sand Ratio (max) (d) | - | - | - | 50 | 50 |
| <p>a. The sum of the shale, siltstone, structurally weak, and clay-ironstone particles must not exceed 8.0 percent for aggregates used in top course. The sum of the shale, siltstone, structurally weak, and clay-ironstone particles must not exceed 12.0 percent for aggregates used in base and leveling courses.</p> <p>b. The fine aggregate angularity of blended aggregates, determined by MTM 118, must meet the minimum requirement. In mixtures containing RAP, the required minimum fine aggregate angularity must be met by the virgin material. NAA fine aggregate angularity must be reported for information only and must include the fine material contributed by RAP if present in the mixture.</p> <p>c. Los Angeles abrasion maximum loss must be met for the composite mixture, however, each individual aggregate must be less than 50</p> <p>d. Sand ratio for 13A and 36A no more than 50% of the material passing the No. 4 sieve is allowed to pass the No. 30 Sieve.</p> | | | | | |

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
**RECYCLED HOT MIX ASPHALT and RECYCLED ASPHALT SHINGLES IN
SUPERPAVE MIXTURES**

CFS:CJB

1 of 3

APPR:KPK:JWB:04-19-13

FHWA:APPR:04-22-13

Delete the first paragraph of subsection 501.02.A.2, on page 234 of the Standard Specifications for Construction in its entirety and replace it with the following:

2. **Recycled Mixtures.** Substitution of reclaimed asphalt pavement (RAP) and/or recycled asphalt shingles (RAS) for part of the new materials required to produce the HMA is acceptable as described in the following subsections. Produce the mixture according to subsection 501.02.C. Inclusion of RAP and/or RAS in the mixture will not change the contract unit price.

Add the following subsection to subsection 501.02.A.2, on page 234 of the Standard Specifications for Construction.

- c. **Reclaimed Asphalt Pavement, Recycled Asphalt Shingles, and Binder Grade Selection.** The method for determining the binder grade in HMA mixtures incorporating RAP and/or RAS is divided into three categories designated Tier 1, Tier 2 and Tier 3. Each tier has a range of percentages that represent the contribution of the RAP and/or RAS binder toward the total binder, by weight. The tiers identified below apply to Superpave mixtures with the following exception: Superpave mixture types E3, E3 High Stress, E10, E10 High Stress, E30, E30 High Stress, E50, and E50 High Stress used as leveling or top course must be limited to a maximum of 27 percent RAP or RAP/RAS binder by weight of the total binder in the mixture.

RAP and/or RAS will not be allowed in the following mixture types, Gap Graded Superpave or Asphalt Stabilized Crack Relief Layer.

RAS materials must not contribute more than 17 percent by weight of the total binder content for any HMA mixture.

The Contractor may substitute RAP and/or RAS for a portion of the new materials required to produce HMA mixture. RAS are defined as processed asphalt shingle material from manufacturing of asphalt roofing shingles or from tear-off shingles from residential structures. Use of post-manufacture RAS or post-consumer RAS is permitted. "Post-consumer RAS", or "tear-offs", are processed shingle scrap removed from residential structures. RAS must comply with all regulatory requirements. RAS must be stockpiled separately from other materials and must also be separated into post-consumer RAS and post-manufacture RAS stockpiles. RAS may be blended with up to 20 percent fine aggregate during processing as shown on the mix design to avoid clumping and allow proper metering of the material from feed bins. Blended RAS and fine aggregate will be considered the final RAS product and not a fine aggregate product. Process the RAS by

ambient grinding or granulating such that 95-100 percent of the particles passing the 3/8 inch size sieve and 90-100 percent of the particles passing the No. 4 sieve.

RAP and/or RAS may be used as a substitute for a portion of the new materials required to produce HMA mixtures in accordance with contract documents. When using RAS the percent of AC in the RAS will be determined by solvent vacuum extraction and the frequency of QC testing will be one test per 250 tons. The percentages of RAP and/or RAS must be as specified on the Mix Design and Job Mix Formula.

RAS must not contain extraneous waste materials. Extraneous materials including, but not limited to, asbestos, metals, glass, rubber, nails, soil, brick, tars, paper, wood, cellulose mat, and plastics must be removed by hand and must not exceed 1.5 percent by weight as determined on material retained on the No. 8 sieve. To conduct deleterious material testing, a representative 500-700 gram sample of processed shingle material is sieved on the No. 8 sieve and any extraneous waste material retained on the No. 8 sieve is picked and weighed. (If RAS is processed to pass the No. 8 Sieve a visual inspection of the raw material may be used to determine if extraneous material exists. Any raw material pile found to have any extraneous material will be rejected. The rejected pile may be used for processing provided the extraneous material is completely removed and re-inspected before further processing.) The frequency of QC testing will be one test per 250 tons of shingles. The percent extraneous is based on the total sample weight. RAS must contain less than the maximum percentage of asbestos fibers based on testing procedures and frequencies established by state or federal environmental regulatory agencies.

RAP and RAS must be stockpiled separately and fed to the plant by separate feed systems capable of metering at the design rate.

- **Tier 1 (0 percent to 17 percent RAP and/or RAS binder by weight of the total binder in the mixture).** No binder grade adjustment is required to compensate for the stiffness of the asphalt binder in RAP and/or RAS.
- **Tier 2 (18 percent to 27 percent RAP or RAP/RAS binder by weight of the total binder in the mixture).** When incorporating only RAP, the required asphalt binder grade must be at least one grade lower for the low temperature than the design binder grade required for the specified project mixture type. Lowering the high temperature of the binder one grade is optional. For example, if the design binder grade for the mixture type is PG 58-22, the required grade for the binder in the HMA mixture containing RAP would be a PG 52-28 or a PG 58-28.

No binder grade change will be required in Tier 2 for all shoulder and temporary road mixtures.

No binder grade change will occur for Tier 2 LVSP, E03 and E1 mixtures used as leveling or top course.

When incorporating RAS the asphalt binder grade will be selected using a blending chart for high and low temperatures. The Contractor must supply the blending chart used in determining the binder selection according to AASHTO M 323.

When incorporating only RAP the asphalt binder grade can also be selected using a blending chart for high and low temperatures. The Contractor must supply the blending

chart used in determining the binder selection according to AASHTO M 323.

- **Tier 3 (≥ 28 percent RAP or RAP/RAS binder by weight of the total binder in the mixture).** The binder grade for the asphalt binder is selected using a blending chart for high and low temperatures. The Contractor must supply the blending chart and the RAP/RAS test data used in determining the binder selection according to AASHTO M 323.

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
**QUALITY CONTROL AND ACCEPTANCE OF PORTLAND CEMENT CONCRETE
(FOR LOCAL AGENCY PROJECTS ONLY)**

C&T:JFS

1 of 16

C&T:APPR:JAB:DBP:11-22-11
FHWA:APPR:11-29-11

a. Description. The Contractor must administer quality control (QC) and the Engineer will administer quality assurance (QA) procedures that will be used for acceptance of and payment for all Portland cement concrete (PCC) for the project. Except as explicitly modified by this special provision, all materials, test methods, and PCC mixture requirements of the standard specifications and the contract apply.

Provide the Engineer a minimum 24 hours notification prior to each concrete placement.

1. Terminology.

Air Content of Fresh Concrete. The recorded total air content of fresh concrete sampled and tested according to this special provision.

Air Content Test Results. The recorded total air content of fresh concrete that is used to mold corresponding strength test specimens for acceptance.

Alkali-Silica Reactivity (ASR). A chemical reaction which occurs over time within concrete between high alkaline cement paste and reactive forms of silica found in some aggregates. In the presence of moisture, an expansive ASR gel is formed which can exert pressure within the concrete, causing random cracking and premature deterioration of the concrete. See subsection c.5.A.

Concrete Mix Design. The process, by which the concrete mixture performance characteristics are defined, based on selected materials, performance requirements, environmental exposure considerations, placement methods, and other factors that control the plastic and hardened properties of the concrete in efforts to produce an economical and durable product.

Job Mix Formula (JMF). The actual batch quantities (mixture proportions) of each constituent included in the concrete mixture, based on adjustments to the target weights from the mix design, necessary to optimize the concrete mixture properties. Submit mix design and JMF on the MDOT Job Mix Formula (JMF) Concrete Field Communication form (MDOT Form Number 1976); include accompanying documentation.

Production Lot. A discrete cubic yard quantity of concrete containing the same JMF and used for the same application, as described in subsection d.2.

Pay Factor (PF). The factor that is determined according to the formula herein, used to calculate the price adjustment for a discrete quantity of concrete. Pay factor determination

will be in accordance with the requirements in subsection d.3 and can not exceed 1.00. Therefore, there will never be a positive pay adjustment.

Quality Assurance (QA). Activities administered by the Engineer dealing with acceptance of the product, including, but not limited to, materials sampling, testing, construction inspection, and review of Contractor QC documentation. All concrete QA sampling and testing will be performed by the Agency. The Agency administered QA is described in section d of this special provision.

Quality Control (QC). All activities administered by the Contractor to monitor, assess, and adjust production and placement processes to ensure the final product will meet the specified levels of quality, including, but not limited to, training, materials sampling, testing, project oversight and documentation. Contractor administered QC is described in section c of this special provision.

QC Action Limits. A range of values established by the Contractor in the QC plan that, if exceeded, requires that corrective action be taken by the Contractor to restore the continuity and uniformity of the mixture and methods in conformance with specification requirements. The QC action limits must not exceed the QC suspension limits.

QC Plan. The project-specific plan developed by the Contractor describing, in detail, all aspects of production and construction for the project to ensure consistent control of quality to meet specification requirements.

QC Plan Administrator. An employee of, or consultant engaged by the Contractor, responsible for developing and overseeing all aspects of QC for the project. This includes, but is not limited to preparing the QC plan, managing the Contractor QC personnel, communicating routinely with the production personnel to ensure quality, initiating corrective action and suspending operations when the process is found to be producing non-conforming materials, and preparing and submitting all necessary QC documentation to the Engineer within the specified time period. The QC Plan Administrator must be a certified concrete technician (Michigan Level II), or have direct authority over a certified concrete technician (Michigan Level II) for the project.

QC Suspension Limits. A range of values defined in Table 1 that, if exceeded on a single QC test, requires that the Contractor suspend operations and determine, correct, and document the deficiencies before resuming production. The Engineer must approve all changes prior to resuming production. The QC suspension limit must not exceed specification requirement thresholds.

Sample. A representative quantity of concrete taken during production which is used to measure the quality characteristics for a respective production lot of concrete.

Sampling Rate. The number of times the fresh concrete is sampled by the Engineer for acceptance. The sampling rate will be determined by the Engineer as described in subsection d.2.B.

Small Incidental Quantity. A single day's placement of less than 20 cubic yards of concrete used for non-structural or non-pavement related applications, including, but not limited to: curb and gutter, sidewalks and sidewalk ramps (excluding driveways and driveway ramps), installing sign or fence posts, guard rail or cable rail foundations

(excluding end anchorage foundations), or other contract items where the small quantity of concrete is not paid for separately, as directed by the Engineer. Price adjustment will not be applied to small incidental quantities provided all other provisions are met for the respective contract item. Requirements for small incidental quantity consideration are described in subsections c.5.G and d.2.B. The corresponding weekly QA 28-day compressive strength test results described in subsection d.2.B must meet specification limits defined in Table 2. ASR requirements specified in subsection c.5.A are not required for small incidental quantities.

Specification Limits. The threshold values defined in Table 2 assigned to each quality characteristic used to evaluate the quality of the material.

Strength Sample Test Result. A strength sample test result consists of the 28-day compressive strength of the 6-inch by 12-inch or 4-inch by 8-inch cylindrical strength test specimens. A strength sample test result is the average of the two companion strength test specimens taken from the same sample of concrete.

Strength Test Specimen. A strength test specimen is defined as each individual 6-inch by 12-inch strength test cylinder or 4-inch by 8-inch strength test cylinder molded and cured according to AASHTO T 23/ASTM C 31 and tested according to AASHTO T 22/ASTM C 39. All respective QC or QA strength test specimens must be the same nominal size.

Note: Strength test specimen cylinder size of 4-inch by 8-inch is permitted only if the nominal maximum coarse aggregate particle size, as specified for the coarse aggregate in the concrete mixture, is 1-inch, or less.

b. Materials. Mixture requirements must be in accordance with the contract.

c. Contractor Administered Quality Control (QC).

1. Contractor Quality Control Plan (QC Plan). Prepare, implement, and maintain a QC plan specific to the project for concrete that will provide quality oversight for production, testing, and control of construction processes. The QC plan must identify all procedures used to control production and placement including when to initiate corrective action necessary to maintain the quality and uniformity of the work.

Develop concrete mix designs and JMFs, as specified, and conduct QC sampling, testing, and inspection during all phases of the concrete work at the minimum frequency, or at an increased frequency sufficient to ensure that the work conforms to specification requirements.

Project-specific items and quality characteristics required in the QC plan include, but are not limited to the following:

- A. Organization chart.
- B. QC Plan Administrator and contact information.
- C. The name(s) and credentials of the QC staff.

- D. Methods for interaction between production and QC personnel to engage timely corrective action, including suspension of work.
- E. Coordination of activities.
- F. Documentation, procedures, and submittals.
- G. Project and plant specifics.
- H. Concrete production facilities inspections and certifications.
- I. Current testing equipment calibration documentation including calibration factor.
- J. Testing and initial field curing facilities for QC and QA strength test specimens (AASHTO T 23/ASTM C 31).
- K. Stockpile management plan.
- L. Corrective action plan.
- M. Mixing time and transportation, including time from batching to completion of delivery and batch placement rate (batches per hour), along with the manufacturer's documentation relative to the batching equipment's capabilities in terms of maximum mixing capacity and minimum mixing time.
- N. Placement and consolidation methods including monitoring of vibration, depth checks, and verification of pavement dowel bar alignment.
- O. Process for monitoring stability of air content of fresh concrete during concrete production and placement.
- P. Hot and cold weather protection considerations and methods.
- Q. Control charts with action and suspension limits.
- R. Verification for non-deleterious alkali-silica reactivity (see subsection c.5.A).
- S. Mix design and JMFs.
- T. Proposed location for use of each JMF on the project.
- U. The frequency of sampling and testing.
- V. Handling, protection, initial curing, and transporting of strength test specimens (AASHTO T 23/ASTM C 31).
- W. Methods to monitor construction equipment loading and open-to-traffic strengths.
- X. Finishing and curing procedure.
- Y. Ride quality control.

Submit the QC plan, for the appropriate items of work, to the Engineer for review a minimum of 10 working days before the start of related work. The Engineer will notify the Contractor of any objections relative to the content of the QC plan within 5 working days of receipt of the QC plan. Do not begin concrete placement before acceptance of the QC plan by the Engineer.

2. QC Records. Maintain complete records of all QC tests and inspections. Document what action was taken to correct deficiencies. Include sufficient information to allow the test results to be correlated with the items of work represented.

Furnish one copy of all QC records and test reports to the Engineer within 24 hours after the date covered by the record in a format acceptable to the Engineer. The Engineer will withhold acceptance of the concrete for failure to provide properly documented and timely QC records and reports.

If the Engineer is performing QA sampling and testing at the same time the Contractor is performing QC sampling and testing, all associated QC records must include the appropriate identification number that correlates with the Engineer's QA identification number.

3. Personnel Requirements. The QC Plan Administrator must have full authority and responsibility to take all actions necessary for the successful implementation of the QC plan, including but not limited to, the following:

A. Monitoring and utilizing QC tests, control charts, and other QC practices to ensure that delivered materials and proportioning meets specification requirements.

B. Monitoring materials shipped to the project, prior to their use, to ensure their continued compatibility toward producing consistent quality.

C. Periodically inspecting all equipment utilized in transporting, proportioning, mixing, placing, consolidating, finishing, and curing to ensure proper operation.

D. Monitoring materials stockpile management, concrete batching, mixing, transporting, placement, consolidation, finishing, and curing to ensure conformance with specification requirements.

E. Maintaining and submitting all QC records and reports.

F. Directing the necessary corrective action to ensure continual conformance within the QC action limits.

G. Suspending production for the project when suspension limits are exceeded.

H. Conducting or monitoring adjustments to the JMF.

Individuals performing QC tests must demonstrate that they are proficient and capable of sampling and testing concrete or aggregate, where applicable, in accordance with the associated test procedures and Agency requirements prior to commencement of related

work. Any adjustments to the JMF must be made by a certified concrete technician (Michigan Level II).

4. QC Laboratory Requirements. Laboratories, including field laboratories and all associated testing equipment that prepare concrete mixes or perform QC testing, must demonstrate to the Engineer that they are equipped, staffed, calibrated, and managed so as to be capable of batching, and testing Portland cement concrete in accordance with the applicable test procedures. Mix designs and their accompanying JMFs must include a statement, signed by a certified concrete technician (Michigan Level II), that all applicable standard test methods have been followed in verifying the mix design and JMF.

5. Mix Design and Documentation. Design concrete mixtures meeting the requirements specified in Tables 601-2 and 701-1 of the Standard Specifications for Construction. Provide the grade of concrete for the section number reference application specified in Tables 601-2 and 701-1, or as specified in the contract. Request variance in writing when proposing a mix design and JMF that exhibits temperature, slump or air content other than those specified. Include the proposed mix design, JMF, and associated trial batch verification test data. Do not use a grade of concrete with a minimum specified 28-day compressive strength greater than what is designated for the application. The maximum water/cementitious ratio must not exceed 0.45.

The maximum slump for Grades P1 and P2 concrete is 3 inches or as documented on the approved JMF. All other grades of concrete will be according to Tables 701-1 A and B of the Standard Specifications for Construction

The specified air content of fresh concrete is 5.5 - 8.0 percent. Air content of fresh concrete less than 5.5 percent for concrete that lies in the finished work at least 3 feet below the surface of the ground or entirely under water will not be cause for rejection.

Use aggregates from only geologically natural sources.

Secure prior approval from the Engineer to use concrete intended for early opening to traffic to facilitate driveway gaps or other features necessary for required local access.

Unless specified otherwise, do not exceed 40 percent substitution by volume of the total cementitious materials with slag cement or fly ash. Use the combined weight of all cementitious materials to determine compliance with the maximum water-cementitious ratio and cementitious material content requirements specified above. Include provisions for cold and hot weather protection in the QC plan.

Use admixture dosage as indicated in the Qualified Products List to reduce mixing water. For night casting, where applicable, a water-reducing admixture may be used in lieu of a water-reducing and retarding admixture, provided the concrete can be placed and finished in the sequence specified on the plans prior to initial set, is not subjected to residual vibration, or is not within the areas influenced by dead load deflections as a result of adjacent concrete placement operations.

A. Alkali-Silica Reactivity. Provide documentation to the Engineer that the concrete mixture does not present the potential for excessive expansion caused by alkali-silica reactivity (ASR). Provide a Test Data Certification with the latest test results (valid for 2 years) conforming to the specified criterion for one of the following standard test

methods ASR requirements specified in subsection c.5.A are not required for small incidental quantities.

(1) Method 1. ASTM C 1260. Mortar Bar Test. If the expansion of the mortar bars is less than 0.10 percent at 14 days of immersion, the fine aggregate is considered non-deleterious to ASR reactivity and may be used in the concrete without the need for ASR mitigation.

(2) Method 2. ASTM C 1293. Concrete Prism Test.

- If the expansion of concrete prisms is not greater than 0.040 percent after 1 year, the fine aggregate is considered non-deleterious to ASR reactivity and may be used in the concrete without the need for ASR mitigation.
- If the expansion of concrete prisms is greater than 0.040, but not exceeding 0.120 percent after 1 year, the fine aggregate is considered moderately deleterious to ASR reactivity and mitigation is required, as follows. A Low-Alkali cement with equivalent alkalis ($\text{Na}_2\text{O} + 0.658 \times \text{percent K}_2\text{O}$) not exceeding 0.60 percent may be used in the concrete mixture to mitigate the potential for ASR reactivity provided the total alkali content for the cementitious materials combination does not exceed 3.0 pounds per cubic yard (Na_2O equivalent).

(3) Method 3. ASTM C 1567. Mortar Bar Test. If no previous test data are available for the fine aggregate that shows it is resistant to ASR using either Method 1 or 2, above, replace 25 to 40 percent of the Portland cement in the concrete mixture with Class F fly ash or Slag Cement (Grade 100 minimum). A blended cement meeting the requirements of ASTM C 595 containing Portland cement and slag cement or Class F fly ash may also be used.

Demonstrate the ability of the fly ash or slag cement to control the deleterious expansion caused by ASR by molding and testing mortar bars according to the standard test method described in ASTM C 1567 using the mix proportions for both the aggregates and the cementitious materials proposed for the project. Make at least three test specimens for each cementitious materials-aggregate combination. If the average of three mortar bars for a given cementitious materials-aggregate combination produces an expansion less than 0.10 percent at 14 days of immersion, the JMF associated with that combination will be considered non-deleterious to ASR reactivity. If the average expansion is 0.10 percent or greater, the JMF associated with that combination will be considered not sufficient to control the deleterious expansion caused by ASR and the JMF will be rejected.

If the expansion exceeds the respective threshold limits for the ASTM used, then the Engineer will not approve the use of that concrete mixture.

B. Contractor Provided Mixes. Provide mix design and accompanying JMFs using the methods of verification included in this special provision. Include sufficient information on constituent materials and admixtures along with trial batch verified physical properties of the fresh concrete, mix proportions per cubic yard for all constituents and compressive strength test results necessary to allow the Engineer to fully evaluate the expected performance of the concrete mixture.

(1) Mix Documentation. Prepare mix designs for each grade of concrete required on the project. Submit JMF for each mix design, including all required documentation, to the Engineer for review 10 working days before the anticipated date of placement. The Engineer will notify the Contractor of any objections within 5 working days of receipt of the mix documentation. Number or otherwise identify each JMF and reference all accompanying documentation to this number. Reference each JMF to the appropriate method of verification. Mix design and JMF submittals that do not include all required documentation will be considered incomplete and the Engineer will return them without review.

Provide all supporting mix documentation, including test reports and mix proportion adjustment calculations. All mix designs and accompanying JMFs must be traceable to a laboratory meeting the requirements of this special provision. Include the necessary documentation described in subsection c.5.

Submit mix design and JMF on the MDOT Job Mix Formula (JMF) Concrete Field Communication form (MDOT Form Number 1976); include accompanying documentation. List the source of materials, bulk density (unit weight) of coarse aggregate (rodding procedure or shoveling procedure), absorption of aggregates, relative density (specific gravity) of aggregates, aggregate correction factors, batch weights, and project specific or historical laboratory test data. Include the recorded air content of fresh concrete using the same admixture and cementitious material sources to be used in the production of the concrete for the project. The 28-day compressive strength and air content of fresh concrete for the concrete which is reported as part of the mix documentation submittal must meet the specification limits described in Table 2.

(2) Job Mix Formula (JMF). Select proportions for concrete mixtures according to ACI Standard 211.1. The volume of coarse aggregate per unit volume of concrete must be 65 to 75 percent, inclusive.

Four methods of verification of proposed JMF are acceptable.

(a) Method 1. Trial Batches. Base trial batches on the same materials and proportions proposed for use on the project. Prepare at least one trial batch for each mix design in sufficient time before starting concrete placement to allow for review according to subsection c.5.B.(1). Provide the results of temperature, slump, density (unit weight), air content of fresh concrete, 28-day compressive strength, and age of concrete at the time of strength testing, for a minimum of three independent samples. For JMF trial batch verification purposes only, 7-day compressive strength test results which report at least 70 percent of the specified 28-day minimum design strength will be sufficient documentation in lieu of 28-day compressive strengths. The average of at least two strength test specimens represents one compressive strength sample test result for each independent sample. A JMF will be considered approved for use only if all of the physical properties of the concrete (as described above) are within specification limits. Provide the necessary ASR documentation as described in subsection c.5.A.

(b) Method 2. Same Mix. Verification based on experience with the same mix design, JMF, and the same materials. Provide the results of temperature,

slump, density (unit weight) air content of fresh concrete, 28-day compressive strength, and age of concrete at the time of strength testing, for a minimum of three independent samples. The average of at least two strength test specimens represents one compressive strength sample test result for each independent sample. Do not substitute material types or sources, including admixtures or cementitious materials, nor change mix proportions in the JMF. A JMF will be considered approved for use only if all of the physical properties of the concrete (as described above) are within specification limits. Provide the necessary ASR documentation as described in subsection c.5.A.

(c) Method 3. Similar Mix. Verification based on experience with a mix design and JMF similar to the proposed mix design that used similar coarse aggregate materials. Substitution of coarse aggregate source is permitted only if the new source is of the same geologic type and meets minimum physical properties as the original aggregate and conforms to the specification requirements for the respective application. Verify, prior to batching, that the proposed changes to the JMF will not affect the properties of the fresh concrete (slump, temperature, air content, density (unit weight), workability), nor result in excessive mortar bar expansion as a result of deleterious reactivity between the aggregates and cementitious materials as described in subsection c.5.A.

Provide the supporting laboratory test documentation as for Method 1. Include all material properties for the original and substituted aggregates. Submit calculations showing how the mix proportions in the JMF were adjusted, based on the documented differences in relative density (specific gravity), bulk density (unit weight) and absorption of the substituted aggregate sources, to produce a theoretical yield of 100 percent.

(d) Method 4. Annual Verification. At the Engineer's option, verification may be accepted annually for a concrete plant rather than on a project basis provided the sources and proportions of the constituent materials, including cementitious materials and source and types admixtures, do not change. If the project is the continuation of work in progress during the previous construction season and written certification is submitted to the Engineer that materials from the same source and with the same mixture properties are to be used, the Engineer may waive the requirement for annual renewal verification of the JMF for the project. Provide the necessary ASR documentation as described in subsection c.5.A.

C. Agency Provided Mixes. Unless otherwise specified in the contract, the Engineer will provide the concrete JMF for the following types of concrete regardless of the total quantity for the project.

- Structural concrete patching mixtures, mortar and grout.
- Prestressed concrete.
- Bridge deck overlay concrete mixtures.
- Project-specific concrete mixtures and grades not defined in Tables 601-2 and 701-1 of the Standard Specifications for Construction.

D. Changes in Materials and Proportions. Any changing from one approved JMF to another for the same grade of concrete must have prior approval by the Engineer. Record all changes to JMF in the QC records along with the rationale for the change. Verify, prior to batching, that the proposed changes to the JMF will not affect the properties of the fresh concrete (slump, temperature, air content, density (unit weight), workability), nor result in excessive mortar bar expansion as a result of deleterious reactivity between the aggregates and cementitious materials as described in subsection c.5.A.

E. QC Sampling and Testing. Conduct startup sampling and testing for temperature, slump, density (unit weight), and air content on the first load. Do not place concrete until testing verifies that the fresh concrete properties have not exceeded the QC action and suspension limit thresholds specified in Table 1. Continue testing subsequent loads as described in the QC plan, for each grade of concrete delivered to the work site each day. The QC sampling and testing must be random and independent from the Engineer's QA sampling and testing.

Ensure that the curing facilities are on site and are equipped to provide the proper environment for initial curing of the QC and QA concrete strength test specimens.

Perform QC sampling and testing of the fresh concrete for air content loss at least once during each week of concrete production, or whenever QC tests have shown that QC action limits have been exceeded, whichever is more frequent. Sample and test a representative haul unit of concrete immediately after its discharge but before the paver or pump hopper, where applicable. Sample and test the concrete representing the same haul unit, again, after the paver or after discharge from the pump and after vibration, where applicable. If the difference in measured air content between the two test locations for the same concrete is greater than two percent air by volume of concrete, suspend operations and administer corrective action. Resume concrete placement only after taking the necessary corrective action to reduce the loss in air content of fresh concrete between the two test locations, as approved by the Engineer. Document the corrective action to be taken in the QC records and make the necessary changes to the QC plan, where applicable.

Concrete exceeding the maximum specification limits for slump or temperature must be rejected regardless of the total mixing time or number of mixing revolutions at the time of arrival to the project.

The Engineer may require the Contractor to administer additional QC sampling and testing if the Engineer determines the Contractor's current QC sampling and testing methodology is shown to be insufficient to ensure continual control of the quality of the concrete.

Take the appropriate corrective action, as described in the QC plan, when QC testing shows the QC action limits for any quality characteristic are exceeded. Suspend production if any of the QC suspension limits are exceeded or if the corrective action is not sufficient to restore the quality to acceptable levels.

Resume production only after making all necessary adjustments to bring the mixture into conformance with all applicable specifications and receiving approval to resume work from the Engineer. Document these adjustments in the QC records.

Table 1: Action and Suspension Limits

| Quality Characteristic | Action Limits | Suspension Limits |
|----------------------------|--------------------------------------|-----------------------------------|
| Air Content (percent) | As Defined in the Contractor QC Plan | < 5.5 or > 8.0 |
| Air Content Loss (percent) | | Greater than 2.0 |
| Conc. Temp. (Deg. F) | | < 45 or > 90 at time of placement |
| Slump (max.) (inch) | | See subsection c.5 |
| Density (unit weight) | | N/A |
| | | |

F. Work Progress Test Specimens. Determine the strength of concrete for opening to construction traffic or regular traffic, for removing shoring and forms, or for other similar purposes in accordance with subsections 104.11, 601.03.H and 701.03.D of the Standard Specifications for Construction, and as approved by the Engineer. Cure work progress test specimens in the same manner as the in-situ concrete. Allow the Engineer to witness testing of work progress cylinder or beam specimens and non-destructive testing, including calibration tests.

For pavement repairs described in section 603 of the Standard Specifications for Construction, the maturity method may be used to determine the in-place, opening-to-traffic flexural strength, provided the necessary preliminary flexural strength versus opening-to-traffic time correlations, using the same materials and JMF, are established and approved by the Engineer before placing the concrete.

G. Reduced QC for Small Incidental Quantities. Reduced levels of on-site QC testing for concrete may be considered for small incidental quantities defined in subsection a.1 provided provisions for administering reduced QC testing and oversight are included in the approved QC plan and the following criteria are met.

(1) The small incidental quantity of concrete will be limited to a single day's concrete placement.

(2) The small incidental quantity is not an integral part of a structural load bearing element.

(3) The Engineer received written certification from the Contractor that the concrete supplier has a current QC plan in place and available for review upon request by the Engineer.

(4) The concrete supplier employs a certified concrete technician (Michigan Level II) available at the plant or on call during concrete placement to validate and authorize modifications to the concrete JMF, as necessary.

(5) Prior to the first concreting operation, concrete representing the JMF for the small incidental quantity has been sampled and tested by a certified concrete technician (Michigan Level I or II) to verify that, historically, the JMF produced a concrete mixture meeting the minimum requirements for density (unit weight), slump, air content, and strength. Annual verification may be acceptable provided there are no changes to the material types or sources, including cementitious materials and admixtures.

(6) The Engineer verified that the temperature, slump, and air content conform to specification requirements at the start of the day's concreting operation associated with the small incidental quantity.

(7) The Engineer is notified and provided sufficient opportunity to witness concrete placement.

d. Agency Administered Quality Assurance (Acceptance).

1. Agency Quality Assurance Plan (QA plan). The Engineer will be responsible for administering the quality-based acceptance and will institute any actions necessary toward its successful implementation.

Acceptance of concrete for full-depth pavement repairs will be according to section 603 of the Standard Specifications for Construction.

The Engineer will develop and follow a QA plan. The Engineer will provide the QA plan to the QC Plan Administrator a minimum of 7 calendar days prior to the pre-production meeting. The QA plan will be reviewed at the pre-production meeting and any proposed changes will be documented.

The nominal QA strength test specimen size, defined in subsection a.1 will be noted in the QA plan.

A. Personnel Requirements. The personnel responsible for field inspection and for obtaining QA samples will possess the required qualifications to collect QA samples. Sampling will be performed by qualified personnel possessing the current applicable certification through the Michigan Concrete Association (Michigan Level I or II) or through the Michigan Concrete Paving Association (Level I or II) certified concrete technicians, or where applicable, (MCAT) certified aggregate technician.

B. QA Testing Correlation. The testing equipment and associated testing personnel for both the Engineer's QA and Contractor's QC will conduct side by side testing of the same concrete representing the first production placement for the project to verify correlation of both the Engineer's and the Contractor's test results for slump, temperature, and air content of fresh concrete. The temperature measuring devices used for QC and QA must correlate relative to each other within 2 degrees F. The Engineer will request an Independent Assurance Test in the event the air content results of two tests conducted between the Engineer's and the Contractor's testers differ by more than 1.0 percent air by volume of concrete.

C. Laboratory Facilities. The testing laboratory with responsibility for acceptance testing on this project is the Agency testing laboratory, or a qualified facility under the authority of the Engineer.

2. QA Sampling and Testing. The Engineer will conduct QA sampling and testing, monitor the Contractor's adherence to the QC plan, and inspect field placed materials. Initial approval is required prior to concrete placement for, temperature, slump and air content, and is based on the Engineer's observance of QC startup sampling and testing described in subsection c.5.E.

A. Production Lot Size and Make Up. A production lot will be defined as a single day of concrete, or as determined by the Engineer. A production lot will not include more than one grade of concrete, concrete of the same grade having different specified slump or air content, or concrete of the same grade having different material sources, mix designs or JMFs.

B. Sampling. Representative QA sampling and testing will be determined by the Engineer during concrete placement. The sampling rate will be one sample per 50 cubic yards, approximately, plus or minus, based on the anticipated total quantity of concrete to be placed and site conditions, with a minimum of one sampling for each day of production.

At the option of the Engineer, small incidental quantities as defined in subsection a.1 may be accepted (visually inspected and noted on the Inspector's Daily Report) without daily 28-day compressive strength QA test specimens provided there is a current acceptable strength test history of the JMF for the project prior to placement of the small incidental quantity. One set of compressive strength QA test specimens will then be molded for each small incidental quantity JMF at least once per week during production, thereafter, as directed by the Engineer (note the test results or identification number for the corresponding weekly QA compressive strength test result on the Inspector's Daily Report for each small incidental quantity). Quality control testing and daily QA testing for temperature, slump, and air content are still required as described in subsection c.5.G.

Samples will be taken from the concrete at the location as close to its final placement into the forms or on the grade as practical.

Samples for acceptance will not be taken at the concrete production facility (batch plant), nor prior to discharge from a concrete pump (excluding tremie seal placement applications). Mix adjustments (beyond normal QC) to the haul unit selected for QA sampling and testing will not be permitted prior to QA sampling and testing. QA sampling will be random and without prior notification.

C. Testing. The location(s) within the project limits for QA testing of the fresh concrete and placement of curing facilities for initial curing of the 28-day compressive strength QA test cylinders will be determined by the Engineer in conformance with the following criteria:

(1) The elapsed time between obtaining the first and the final portion of the composite sample must not exceed 15 minutes.

(2) Testing for slump, temperature, and air content of fresh concrete must begin within 5 minutes after obtaining the final portion of the composite sample.

(3) Molding of the 28-day compressive strength QA test cylinders must begin within 15 minutes after obtaining the final portion of the composite sample.

(4) The concrete sample must be protected from the sun, wind, and other sources of rapid evaporation, and from contamination.

The Contractor will provide curing facilities equipped to ensure the proper environment for the Engineer's QA concrete strength test specimens during initial cure. Each initial

cure facility must provide ventilation or insulation, where applicable, to ensure the ambient temperature surrounding the specimens is maintained according to AASHTO T 23. Failure by the Contractor to maintain the proper curing environment during initial cure will not be basis for rejection of QA samples. Each initial curing facility must be capable of being locked, using an Agency provided padlock. The Contractor will ensure that all initial curing facilities are accounted for at all time, and protected against, theft and damage. The Contractor will locate and secure each initial cure facility throughout the project limits in such a manner so as to minimize excessive transport of the test specimens prior to initial cure, as follows:

- Immediately after finishing molded specimens, the Engineer will move the QA concrete strength test specimens to the closest initial cure facility provided by the Contractor.
- Immediately after all QA concrete strength test specimens are placed into the cure facility and the proper initial curing conditions have been established, the Engineer will secure the facility using the Agency provided padlock. Access to the QA concrete strength test specimens, thereafter, must be coordinated with the Engineer and will only be permitted in the presence of the Engineer.
- The Engineer will transport the QA concrete strength test specimens within 48 hours after molding, but not prior to 8 hours after final set of the concrete, from the initial curing facility to the Agency designated testing laboratory for final curing and strength testing. The specimens will be protected with a suitable cushioning material to prevent damage from jarring during transport. The total transportation time must not exceed 4 hours prior to commencement of final curing.

D. QA Stop Production Criteria. The Engineer will issue a Notice of Non-Compliance with Contract Requirements (Form 1165) and concrete production must stop when one or more of the following are observed.

(1) The QA testing shows that one or more of the suspension limits for quality characteristics defined in Table 1 are in non-compliance.

(2) The QC plan is not being followed.

(3) Segregation, excessive slumping of unsupported slipformed edges, or other notable changes in the fresh concrete properties is observed that may prevent proper placement, consolidation and finishing, or compromise the performance or long-term durability of the finished product.

(4) The required curing system is not being applied in a timely manner, as specified by the contract.

(5) If the difference in measured air content between the two testing locations for the same concrete is greater than two percent air by volume of concrete, as follows:

(a) immediately after discharge but before the paver or pump hopper (where applicable), and

(b) after the paver or discharge from the pump (where applicable).

The Engineer will issue a Notice to Resume Work (Form 1165) only after all necessary adjustments are made to restore conformance with all applicable specifications, and the appropriate documentation is made in the QC records.

E. QA Records. The Engineer will maintain a complete record of all QA tests and inspections. The records will contain, as a minimum, signed originals of all QA test results and raw data, and resulting calculations. The QA test results will not be provided to the Contractor until the corresponding QC test results are received by the Engineer.

3. Pay Factor Determination and Price Adjustment. The Engineer's QA test results will be used to determine the pay factor (PF) and price adjustment (ADJ). The Contractor's QC test results will not be used for pay factor and price adjustment analysis. The Engineer will complete pay factor and price adjustment analysis within 7 days after completion of all 28-day compressive strength testing for the representative production lot.

Table 2: Specification Limits

| Quality Characteristic | Specification Limits |
|--|------------------------------|
| Air Content (percent) | 5.5 – 8.0 |
| Conc. Temp. (Deg. F) | 45 - 90 at time of placement |
| Slump (max.) (inch) | See subsection c.5 |
| 28-day Compressive Strength | LSL, subsection c.5 |
| Rejection Limit - Lower 28-day Compressive Strength | 0.75 x (LSL) |

The specification limits for the fresh concrete properties are defined in subsection c.5. Concrete not conforming to the requirements specified in subsection c.5 may be rejectable and subject to further evaluation, as directed by the Engineer.

Use the following formula to calculate the PF and associated price ADJ for each concrete item.

$$PF = \frac{\text{Tested Strength}}{LSL}$$

$$ADJ = (PF-1) (\text{Price})$$

Tested Strength = QA 28-day compressive strength sample test result

LSL = Lower specification limit (Minimum Design Strength, see subsection c.5)

PF = Pay Factor (carried to two decimal places, not to exceed 1.00)

ADJ = Price adjustment to be applied to the quantity represented by the QA test

Price = Contract unit price bid for the pay item

4. Re-evaluation of Rejectable Concrete. If the tested strength does not achieve the lower rejection limit specified in Table 2, the associated concrete will be rejected and the Engineer will require additional evaluation to decide what further action may be warranted. If the Engineer determines that non-destructive testing (NDT) or coring is necessary, this work will be done by the Contractor in the presence of the Engineer within 45 days from

concrete placement. All costs associated with this work will be borne by the Contractor. The Engineer will take custody of all cores intended for re-evaluation immediately after coring. If NDT is used to estimate the in-situ strength, a calibrated relationship between the concrete mixture and the NDT apparatus must have been established prior to NDT testing according to its respective standard test method. Test results from re-evaluation of rejectable concrete using NDT or coring will not be used for pay factor (PF) and price adjustment (ADJ) purposes. If the results from re-evaluation confirm that the lower rejection limit for 28-day compressive strength has been achieved, the represented quantity of concrete will remain in place and a pay factor (PF) of 0.75 will be applied for price adjustment (ADJ) determination. However, if the results from re-evaluation confirm that the lower rejection limit for 28-day compressive strength has not been achieved, as described above, the Engineer will elect to do one of the following.

A. Require removal and replacement of the entire represented quantity of concrete with new initial tests and pay factor and price adjustment analysis procedure conducted.

B. Allow the represented quantity of concrete to remain in place and apply an adjustment of minus 50.00 percent to all concrete items in the lot.

C. Allow the Contractor to submit a plan for corrective action for the Engineer's approval, to address the disposition of the rejectable concrete. If the Engineer does not approve the plan for corrective action, subsection d.4.A or d.4.B will be applied.

e. Measurement and Payment. If a price adjustment is made for reasons included in this special provision, that adjustment will be made using the original unit price bid for the specific item. If a contract unit price requires adjustment for other reasons not described in this special provision, the adjustments will be made using the original unit price and the adjustments will be cumulative.

Separate payment will not be made for providing, implementing, and maintaining an effective QC program. All costs associated with this work will be included in the applicable unit prices for the concrete items. Failure by the Contractor to maintain the proper curing environment during initial cure will not be basis for claim against the Agency.

All costs associated with providing, locating, relocating, maintaining, and securing the adequate number of portable curing facilities for the project, necessary to provide sufficient initial curing for the Contractor's QC and Engineer's QA strength test specimens will be included in the applicable unit prices for the concrete items. No additional payment will be permitted. The Contractor is responsible for damage, theft, subsequent replacement, and removal after completion of the work for each curing facility used on the project.

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
LONGITUDINAL PAVEMENT MARKING REMOVAL

OPR:JGM

1 of 2

C&T:APPR:JAJ:BRZ:11-07-08
FHWA:APPR:06-13-11

Delete subsection 812.03.F, on page 615 and 616 of the Standard Specifications for Construction, in its entirety and replace it with the following:

F. Pavement Marking Removal. Remove pavement markings that conflict with proposed temporary traffic markings before making any changes in the traffic pattern. Place temporary pavement markings when pavement markings are removed or obscured for more than 24 hours before a change in the traffic pattern. Type R markings must be placed according to subsection 812.03.D.11 before the close of the workday.

Where blast cleaning is used for marking removal, and the removal location is within 10 feet of an open lane, immediately remove residue and dust. Use a vacuum attachment operating concurrently with the blast cleaning operation for removal of residue and dust. Properly dispose of collected residue and dust.

1. **Removal of Less than 5000 Feet per Stage.** Remove pavement markings causing as little damage as possible to the surface texture of the pavement and by methods approved by the Engineer. Methods that can provide acceptable results are: sandblasting using air or water; shot blasting; high-pressure water; steam or superheated water; mechanical devices such as grinders, sanders, scrapers, scarifiers, and wire brushes.

The contractor is responsible to immediately clean up any debris that is generated. Continuous vacuuming equipment is not required.

2. **Removal of Greater than 5000 Feet per Stage.** Remove pavement markings using self-propelled truck mounted removal equipment. The equipment must be capable of continuously vacuuming up the removal debris as the operation progresses. If the amount of debris generated during the removal process is greater than the vacuuming capability of the removal truck, a self-propelled sweeper operating immediately behind the removal equipment is required. The removal truck must be capable of eliminating the airborne dust while operating.

Remove pavement markings causing as little damage as possible to the surface texture of the pavement and by methods approved by the Engineer:

- a. **Asphalt Surfaces.** Contractor may use any type of self-propelled truck mounted removal equipment except water blasting, provided that the equipment is capable of continually vacuuming the removal debris.

- b. **Concrete Surfaces to be Removed During Construction.** Contractor may use any type of self-propelled truck mounted removal equipment provided that the equipment is capable of continually vacuuming the removal debris.
- c. **Concrete Surfaces to Remain in Place.** A self-propelled truck mounted water blaster must be used to minimize the scarring of the concrete surface. Use equipment capable of continually vacuuming the removal debris.

Do not use paint or bituminous bond coat to cover existing and inappropriate pavement markings. Use tape only when authorized by the Engineer.

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
RECESSED PAVEMENT MARKINGS

OPR:JGM

1 of 2

C&T:APPR:JAR:DBP:08-24-11
FHWA:APPR:8-31-11

a. Description. This work consists of preparing (grooving) pavement surface for recessed longitudinal and transverse pavement markings in accordance with section 811 of the Standard Specifications for Construction, the plans, and this special provision.

b. Materials. None specified.

c. Construction. Install a recess (groove) in accordance with the manufacturer's installation instructions. Ensure all recessing configurations are in accordance with the Michigan Manual of Uniform Traffic Control Devices and the Pavement Marking Standards.

1. Grooving Concrete and HMA Pavement. If there are no markings on the pavement, paint a temporary tracer line (with no beads) exactly where the permanent markings will be placed. Use these lines as a template for the grooving operation.

Use equipment and method approved by the manufacturer of the recessed pavement marking material to be recessed for forming grooves in pavement surfaces. Dry-cut the grooves in a single pass using stacked diamond cutting heads on self-vacuuming equipment capable of producing a finished groove ready for marking material installation.

Ensure that the bottom of the groove has a fine corduroy finish. If a coarse tooth pattern results, increase the number of blades and decrease the spaces on the cutting head until the required finish is achieved.

2. Groove Dimensions. Grooves for recessing pavement markings must be in accordance with the following:

Longitudinal Markings:

| | |
|------------------|---|
| Groove Width: | Material width +1 inch, ($\pm 1/8$ inch) |
| Groove Depth: | As recommended by the manufacturer, (± 5 mils) |
| Groove Position: | On the lane, 4 inches in from the joint line, ($\pm 1/8$ inch) |

Transverse Markings:

| | |
|------------------|--|
| Groove Width: | Material width +1 inch, ($\pm 1/8$ inch) |
| Groove Depth: | As recommended by the manufacturer, (± 5 mils) |
| Groove Position: | In the exact location where the transverse marking (crosswalk or stop bar) will be placed. |

3. Placing Recessed Pavement Markings. The pavement marking material will be placed in the grooves within 24 hours of the grooves being made. Ensure the grooves are

clean and dry prior to placing pavement marking material being placed. Assure the groove is located so the entire marking can be placed in the groove.

d. Measurement and Payment. The completed work, as described, will be measured and paid for at the contract unit price using the following pay items:

| Pay Item | Pay Unit |
|--|-----------------|
| Recessing Pavement Markings, Longit..... | Foot |
| Recessing Pavement Markings, Transv..... | Square Foot |

Recessing Pavement Markings, Longit includes all equipment and labor required to complete the pavement grooving for placement of longitudinal recessed pavement markings.

Recessing Pavement Markings, Transv includes all equipment and labor necessary to complete the pavement grooving for placement of transverse recessed pavement markings.

Recessing Pavement Markings, Longit and **Recessing Pavement Markings, Transv** include placing the temporary tracer line (with no beads), when required.

Pavement marking materials, including retroreflective pavement marking required for traffic control, will be paid for separately using the appropriate pay items.

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
MODIFIED URETHANE PAVEMENT MARKINGS

OPR:JGM

1 of 3

C&T:APPR:JAR:DBP:08-31-11
FHWA:APPR:08-31-11

a. Description. This work consists of preparing pavement surfaces and applying retroreflectorized white and yellow two-component, modified urethane pavement markings including lines, legends, symbols, crosswalks and stop bars. Complete this work according to this special provision, the plans, the standard specifications, and as directed by the Engineer.

b. Materials. Select a modified urethane pavement marking material from the Qualified Products List (QPL) (811.03D7). Use standard glass beads as called for in section 920 of the Standard Specifications for Construction, except as modified by this special provision. Ensure all materials are shipped to the job site in sturdy containers marked in accordance with section 920 of the Standard Specifications for Construction, and the contract

Provide certification to the Engineer from the modified urethane manufacturer documenting the Contractor's qualifications to place the modified urethane in a manner acceptable to the manufacturer and in compliance with this special provision. Provide technical data regarding material type and application rate from the modified urethane manufacturer to the Engineer prior to starting work.

1. Recessed Markings. For recessed markings, use a double drop system of large and standard glass beads, a double drop system of ceramic elements and standard glass beads or an alternate system approved by the Engineer. The large glass beads must meet all Federal specifications for a Type 4 designation glass bead. Follow the modified urethane manufacturer's recommendations for type, gradation, and loading rates with these systems. Apply modified urethane at a thickness of 17 to 20 mils.

2. Non-Recessed Markings. For non-recessed markings, use standard glass beads or an alternate approved by the Engineer. Follow the modified urethane manufacturer's recommendations for type, gradation, and loading rates of glass beads. Apply modified urethane at a thickness of 17 to 20 mils.

c. Construction.

1. Temperature Limitations. Follow the temperature limitations recommended by the modified urethane Manufacturer. Measure and record the temperature before the start of each day of marking operation and at any other time deemed necessary by the Manufacturer or the Engineer.

2. Surface Preparation. Surface preparation requirements are dependent on surface conditions. Subsections A through D below apply to the application of recessed lines, non-recessed lines and special makings, as noted:

A. New Hot Mix Asphalt (HMA). For the purpose of this special provision, the Department defines new HMA pavement as having no oil drips, residue, debris, or temporary or permanent markings. Prepare the surface as follows:

(1) For non-recessed lines and special markings, scarify the proposed marking area using non-milling grinding teeth or shot blasting.

(2) For recessed lines, prepare pavement recess as specified in the FUSP 12SP811(F); to be paid for separately as Recessing Pavement Markings, ___.

B. New Portland Cement Concrete (PCC). For the purpose of this special provision, the Department defines new PCC pavement as having no oil drips, residue, debris, or temporary or permanent markings. Prepare the surface as follows:

(1) For non-recessed lines and special markings, remove curing compound in accordance with the subsection 811.03.C of the Standard Specifications for Construction; to be paid for separately per subsection 811.04.

(2) For recessed lines, prepare pavement recess as specified in the FUSP 12SP811(F); to be paid for separately as Recessing Pavement Markings, ___.

C. Existing HMA or PCC Surface. For the purpose of this special provision, the Department defines existing HMA or PCC pavement as having oil drips, residue, and debris, but no temporary or permanent markings. Prepare the surface as follows:

(1) For non-recessed lines and special markings, scarify the proposed marking area using non-milling grinding teeth or shot blasting.

(2) For recessed lines, prepare pavement recess as specified in the FUSP 12SP811(F); to be paid for separately as Recessing Pavement Markings, ___.

D. Existing HMA or PCC Surface With Existing Non-Modified Urethane Marking. For the purpose of this special provision, the Department defines existing HMA or PCC pavement with existing non-modified urethane marking as having oil drips, residue, and debris, and existing non-modified urethane markings. Prepare the surface as follows:

(1) For non-recessed lines and special markings, scarify the proposed marking area using non-milling grinding teeth or shot blast. Occasionally an existing modified urethane marking may require complete removal. When the Engineer determines that complete removal is required, complete the removal in accordance with the Standard Specifications for Construction; to be paid for as Rem of Spec Mrkg per subsection 811.04 or Pavt Mrkg, Longit, ___, Rem per subsection 812.04 of the Standard Specification for Construction.

(2) For recessed lines, prepare pavement recess as specified in the FUSP 12SP811(F); to be paid for separately as Recessing Pavement Markings, ___.

When pavement surface preparation is complete, power broom the pavement surface; then use compressed air to remove residue and debris.

Control airborne dust and similar debris generated by surface preparation and cleanup to prevent a hazard to motor vehicle operation or nuisance to adjacent property.

Do not damage transverse and longitudinal joint sealers when cleaning HMA or PCC pavements. If joint sealers are damaged the Contractor must repair or replace, as directed by the Engineer, at the Contractor expense.

Conduct grinding, scarifying, sandblasting, shot blasting, or other operations in such a manner that the finished pavement surface is not damaged and does not exhibit a pattern that will mislead or misdirect the motorist. Use vacuum-type equipment or equivalent to collect and contain debris generated by this operation.

3. Placement. Place modified urethane materials and beads according to this special provision and the modified urethane manufacturer's requirements.

d. Measurement and Payment. The completed work, as described, will be measured and paid for at contract unit price using the following pay items:

| Pay Item | Pay Unit |
|--|-----------------|
| Pavt Mrkg, Modified Urethane, (symbol) | Each |
| Pavt Mrkg, Modified Urethane, (legend) | Each |
| Pavt Mrkg, Modified Urethane, ___ inch, Crosswalk | Foot |
| Pavt Mrkg, Modified Urethane, ___ inch, Stop Bar | Foot |
| Pavt Mrkg, Modified Urethane, ___ inch, Cross Hatching (color) | Foot |
| Pavt Mrkg, Modified Urethane, ___ inch, (color) | Foot |

The Engineer will measure and pay for removing curing compound or existing pavement markings separately as described in section c. Construction, of this special provision.

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
MOBILE ATTENUATOR

OFS:CGB

1 of 4

APPR:CT:CRB:04-19-13
FHWA:APPR:05-09-13

a. Description. This special provision sets the guidelines for when mobile attenuators are to be used to protect workers or work equipment from vehicular traffic. Throughout this special provision, mobile attenuators refer to truck mounted attenuators (TMA) and trailer mounted attenuators.

Use mobile attenuators in projects to protect personnel or equipment when one or more of the following conditions are met.

- The vehicle is designated as a protective vehicle (shadow vehicle or barrier vehicle) as part of the maintenance of traffic typicals, maintenance of traffic plans, or other contract documents.
- Aerial work is being performed on scaffolding, lifts, hoists, bucket trucks, etc., where workers using this equipment are in an occupied lane or shoulder and not protected by temporary concrete barrier. Mobile attenuators are not intended to be used for the removal, installation or maintenance of traffic signals.
- Mobile/short duration operations such as pavement marking convoys, grinding in rumble strips, permanent sign installations, luminescent installations, etc. Mobile attenuators are not intended to be used for the removal or installation of special markings.

Mobile attenuators can not be mounted on the vehicle or equipment used by personnel to complete aerial work. Mobile attenuators can not be used as a temporary/permanent barrier ending except during replacement of damaged temporary/permanent barrier ending. In the event that a mobile attenuator is used as a temporary safety measure for a damaged temporary/permanent barrier ending, the maximum length of time that it can be used for this purpose is 48 hours or as approved by the Engineer.

1. Stationary and Mobile Operation. This work consists of furnishing a vehicle with the required gross vehicle weight as shown in the tables below and furnishing, installing and operating a mobile attenuator according to the manufacturer's recommendations, the contract, and/or as directed by the Engineer. Locate the attenuator placement as detailed in the applicable maintaining traffic typical, maintenance of traffic plans or other contract documents.

Securely attach material loaded onto the vehicle to obtain the required gross weight, for transport or during work operations to the vehicle. Hazardous materials will not be allowed on this vehicle. Materials that will be off loaded and incorporated into the construction activities will not be considered part of the vehicle gross weight.

b. Materials and Design. Use mobile attenuators that meet or exceed the requirements of

National Cooperative Highway Research Program Report 350 (NCHRP 350) Test Level 2 (TL-2) or Test Level 3 (TL-3), or *Manual for Assessing Safety Hardware* (MASH) TL-2 or TL-3, as described below for work zone traffic control devices.

1. Utilize a mobile attenuator rated for NCHRP 350, TL-2 or MASH, TL-2 on non-freeway roadways with a normal posted speed of 40 mph or less. TL-2 mobile attenuators are prohibited for use on all freeways, non-freeway roadways, and work zones with posted speed limits of 45 mph or greater.
2. Utilize a mobile attenuator rated for NCHRP 350, TL-3 or MASH, TL-3 on freeways, non-freeway roadways and work zones with posted speed limits of 45 mph or greater. TL-3 mobile attenuators may be used on all roadways and work zones regardless of the posted speed limit.

Supply to the Engineer a copy of the Federal Highway Administration (FHWA) letter of eligibility for federal aid stating the mobile attenuator meets the appropriate NCHRP 350 or MASH test level specified in the above stated criteria. In addition, supply a letter to the Engineer stating the mobile attenuator system has been installed and maintained according to manufacturer's specifications.

The face of the mobile attenuator, visible to approaching traffic must have reflectorized alternating yellow and black stripes, sloping downwards in both directions from the center of the attenuator.

c. Operating Details and Utilization. Operate the mobile attenuator as per manufacturer's recommendation, the contract, and/or as directed by the Engineer. This includes, but is not limited to, the following:

- The height from the bottom of the mobile attenuator to the roadway surface must be 12 inches (± 2.5 inches) and within manufacturer's specifications.
- The mobile attenuator must be parallel (level) with the roadway surface.
- Provide a shoulder harness and headrest for the mobile attenuator vehicle's operator.

For stationary operations, when operating the vehicle with the attenuator installed, the vehicle must be in second gear if it has a standard transmission (park if an automatic transmission), with the parking brakes set and steering wheels turned away from the work area and traffic, if possible. Place the mobile attenuator according to roll-ahead distance in Tables 1 or 2.

If the mobile attenuator is involved in a crash, supply pictures of the crash scene and the damage of the mobile attenuator to the Engineer within 3 days of the incident.

d. Measurement and Payment. Mobile attenuators will be furnished and operated at no cost to the Department for all contract items associated with pavement marking operations.

The cost for the equipment, mobilization and labor to furnish and operate this equipment will be included in other contract items. The Department will pay for repair or replacement of a mobile attenuator called for as part of the pavement marking operations if damaged by something other than the Contractor's own equipment, during contract operations as described below. Measurement and payment for the use of mobile attenuators on all other contract items will be as described below.

| Pay Item | Pay Unit |
|-------------------------|-----------------|
| Mobile Attenuator | Each |

The Engineer will pay for the maximum number of mobile attenuators deployed per the maintenance of traffic typicals, maintenance of traffic plans or other contract documents and in use at any one time during the life of the project or as approved by the Engineer. If the Contractor uses alternative construction operations or methods that require additional mobile attenuators that exceed the amount specified in the contract, the additional mobile attenuators will be provided at the Contractor's expense.

The Department will pay for repair or replacement of a mobile attenuator called for as part of the contract if damaged by something other than the Contractor's own equipment, during contract operations by contract modification with the name of the extra pay item to be defined as **Mobile Attenuator, Repair** or **Mobile Attenuator, Replace** if the following criteria are met:

1. The damaged or destroyed attenuator must meet all of the manufacturing and operating criteria of this special provision.
2. The Contractor must have the repaired/replaced attenuators inspected by the Manufacturer/Supplier to insure that the units are in good working order. Documentation of the inspection is to be provided to the Engineer prior to implementing the mobile attenuators for use.
3. Provide a crash report from the enforcement agency involved in the accident investigation.
4. Pictures of the accident scene and damage to the mobile attenuator are forwarded to the Engineer.
5. The attenuator repair or replacement will be for the actual unit as required by this special provision. The cost to perform the repairs or replace the attenuator including installation will be paid for by the Contractor. Provide to the Engineer a detailed invoice from the Supplier showing material costs for replacement or repair for payment. The repair or replacement cost must not exceed the Suppliers invoice cost for a new attenuator.
6. The Department will not pay for any costs that are required to replace or repair the attenuator vehicle and any other items which were used to operate the attenuator.
7. Attenuators that have been repaired or replaced as part of the contract are not eligible for additional payment using the **Mobile Attenuator** pay item once the attenuator is put back into service.

Table 1. Guidelines For Roll-Ahead Distance For Mobile Attenuator Vehicles Test Level 2

| Weight of Mobile Attenuator Vehicle (Minimum) | Posted Speed (mph) (Posted Speed Prior to Work Zone) | Roll Ahead Distance(a) (Distance from front of Mobile Attenuator Vehicle to Work Area) |
|---|--|--|
| 5.5 Tons (Stationary Operation) | 40 or Less | 25 feet |
| a. Roll ahead distances are calculated using a 4,410 pound impact vehicle weight. | | |

Table 2. Guidelines For Roll-Ahead Distance For Mobile Attenuator Vehicles Test Level 3

| Weight of Mobile Attenuator Vehicle (Minimum) | Posted Speed (mph) (Posted Speed Prior to Work Zone) | Roll-Ahead Distance(a) (Distance from front of Mobile Attenuator Vehicle to Work Area) |
|--|--|--|
| 5 Tons (Mobile Operation) | 60-70 | 175 feet |
| | 50-55 | 150 feet |
| | 45 | 100 feet |
| 12 Tons (Stationary Operation) | 60-70 | 50 feet |
| | 50-55 | 25 feet |
| | 45 | 25 feet |
| a. Roll ahead distances are calculated using a 10,000 pound impact vehicle weight. | | |

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
TRAFFIC CONTROL QUALITY AND COMPLIANCE

OPR:JJG

1 of 2

C&T:APPR:CER:DBP:01-20-11
FHWA:APPR:06-20-11

Delete the subsection 812.03.C, Deficient Traffic Control Operations on page 601 of the Standard Specifications for Construction in its entirety, and replace with the following.

C. Deficient Traffic Control Operations.

1. Traffic Control Quality and Compliance. The following applies to all aspects of the traffic control plan and traffic control devices except the Type D lights on plastic drums which are covered elsewhere in the contract.

a. Traffic Control not Anticipated in Design. If at any time during the project, including the time during the seasonal suspension, the Engineer documents that the traffic control requires improvements beyond the scope of the Traffic Control Plan, the Engineer will provide written instructions to the Contractor and traffic control supplier what improvements are required. The Contractor must develop and submit to the Engineer for approval, a written implementation schedule for improvements. If the schedule is not approved, or if the schedule is approved but is not followed, the Department will adjust the contract according to subsection 812.03.C.1.c.iii. If the implementation schedule is not followed, the Engineer will notify the Contractor and traffic control supplier in writing that they are in violation of this subsection. The work of making traffic control improvements directed by the Engineer that are beyond the scope of the Traffic Control Plan will be paid for as extra work.

b. As Designed Traffic Control. If at any time during the project, including the time during the seasonal suspension, the Engineer documents that the traffic control is deficient, inadequate or improperly placed, the Engineer will provide written notification with instructions for corrective action to the Contractor and traffic control supplier. Upon receipt of the notification of corrective action, the Contractor has 4 hours to correct the traffic control. If the traffic control cannot be corrected within the 4 hour time period, the Contractor will develop a written implementation schedule for the corrective action and submit the schedule to the Engineer for approval within 1 hour of receiving the written notification. If the schedule is not approved, or if the schedule is approved but is not followed, the Department will adjust the contract according to subsection 812.03.C.1.c.iii. If the implementation schedule is not followed, the Engineer will notify the Contractor and traffic control supplier in writing that they are in violation of this subsection.

c. Corrective Action. The Engineer will give written notification to the Contractor as identified above. Failure to make corrections within the timeframe required may result in the following actions by the Engineer:

- i. Stop work on the project until the Contractor completes corrective action,

- ii. Order corrective action by others in accordance with subsection 107.07, subsection 108.02, subsection 812.03.B, and in the interest of public safety.
- iii. A contract price adjustment will be made in the amount of \$100 per hour for every hour or portion thereof the improvements or corrective action remains incomplete as described herein. If improvements or corrections have not been made to the satisfaction of the Department, the contract will be adjusted until the traffic control is acceptable.

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
PAYMENT FOR MINOR TRAFFIC DEVICES AND TRAFFIC REGULATOR CONTROL

OPR:JJG

1 of 1

C&T:APPR:BJO:DBP:07-19-11
FHWA:APPR:07-19-11

Delete Table 812-1 in subsection 812.04.E, on page 625 of the Standard Specifications for Construction, in its entirety and replace with the following.

Table 812-1 Partial Payment Schedule for Minor Traf Devices and Traffic Regulator Control

| Percent of Original Contract Amount Earned | Total Percent of Unit Price Paid |
|--|----------------------------------|
| First Use | 15 |
| 25 | 30 |
| 50 | 55 |
| 75 | 80 |
| 90 | 100 |

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
SUPPORTS FOR TEMPORARY SIGNS

OPR:CRB

1 of 1

C&T:APPR:MWB:DBP:06-26-12

FHWA:APPR:08-18-12

Delete the last paragraph of subsection 812.03.D.3, on page 604 of the Standard Specifications for Construction in its entirety, and replace with the following.

Mount construction signs on portable sign support standards only if signs are to remain in place for 14 days or less, or as allowed by the Engineer if fixed supports are not possible.

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
SECURITY OF PORTABLE CHANGEABLE MESSAGE SIGNS

OFS:CRB

1 of 1

APPR:LWB:DBP:10-09-13
FHWA:APPR:10-09-13

a. Description. This work consists of making certain the portable changeable message sign (PCMS) is secure, and complies with the following:

1. Create unique usernames and passwords (not defaults) for access to the PCMS local controls.
2. Remove all literature (manuals, instructions, etc.) from the PCMS controller enclosure.
3. Use a padlock, keyed lock, etc to prevent access to the controller enclosure.
4. Provide the Engineer up to 3 keys, or the lock combination, as well as the usernames and passwords.
5. Provide at minimum, one classroom style training session of 2 hours, on PCMS field equipment, including but not limited to: posting and removal of messages, diagnosing field equipment malfunctions including messaging and communications errors. All training schedules, syllabus and materials are to be supplied by the Contractor and approved by the Engineer prior to delivery of training. Unless otherwise specified by the Engineer, the number of participants at each training session will be limited to a maximum of 20 individuals

MDOT reserves the right to take full messaging control of any PCMS at any time throughout the duration of the project. This includes posting any message determined to be appropriate by MDOT

MDOT may, at any time, inspect PCMS boards that are on site to verify that the security measures in this special provision are being followed.

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
GRANULAR MATERIALS

C&T:ACR

1 of 1

C&T:APPR:WRE:DBP:10-13-06
FHWA:APPR:06-01-11

a. Materials. Bottom ash may be used for granular material for the pay items Subbase, LM; Subbase, CIP; Embankment, LM and Embankment, CIP. Bottom ash may not be used for any other pay items, unless approved by the Engineer.

The only approved source for furnishing bottom ash as granular material for Subbase, LM; Subbase, CIP; Embankment, LM and Embankment, CIP is the DTE power plant at Monroe.

Provide written documentation to the Engineer that the bottom ash came from DTE's Monroe plant before using the material on the project. All specification requirements for granular materials will remain the same.

MICHIGAN
DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION
FOR
CRUSHED CONCRETE NEAR WATER

C&T:JFS

1 of 1

C&T:APPR:KAS:DBP:02-24-12
FHWA:APPR:02-24-12

Add the following paragraph after the first paragraph of Subsection 902.05 on page 743 of the Standard Specifications for Construction:

The use of crushed concrete is prohibited on the project within 100 feet of any water course (stream, river, county drain, etc.) and lake, regardless of the application or location of the water course or lake relative to the project limits.

Add the following paragraph after the first paragraph of Subsection 902.06 on page 743 of the Standard Specifications for Construction:

The use of crushed concrete is prohibited on the project within 100 feet of any water course (stream, river, county drain, etc.) and lake, regardless of the application or location of the water course or lake relative to the project limits.

Add the following paragraph after the fourth paragraph of Subsection 902.07 on page 744 of the Standard Specifications for Construction:

The use of crushed concrete is prohibited on the project within 100 feet of any water course (stream, river, county drain, etc.) and lake, regardless of the application or location of the water course or lake relative to the project limits.

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
ALTERNATIVE GRANULAR MATERIALS FOR FILL AND SUBBASE

C&T:ACR

1 of 1

C&T:APPR:JFS:DMG:04-03-12
FHWA:APPR:04-09-12

Delete subsection 902.07.A, on page 744, of the Standard Specifications for Construction, in its entirety and replace with the following:

A. Class I, Class IIAA, or Dense-Graded Aggregate 21A, 21AA and 22A material for Class II material;

Delete subsection 902.07.B, on page 744, of the Standard Specifications for Construction, in its entirety and replace with the following:

B. Class I, Class II, Class IIA, Class IIAA, Class IIIA or Dense-Graded Aggregate 21A, 21AA and 22A material for Class III material;

Delete subsection 902.07.C, on page 744, of the Standard Specifications for Construction, in its entirety and replace with the following:

C. Class I material for Class IIAA material; and

Add the following subsection to Section 902.07, on page 744, of the Standard Specifications for Construction.

D. Dense-Graded Aggregate 21A, 21AA and 22A material for Class IIA.

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
MICRONIZED COPPER WATER BASED WOOD PRESERVATIVE SYSTEMS

C&T:SCK

1 of 1

C&T:APPR:KAS:DBP:03-27-12
FHWA:APPR:05-08-12

a. Description. Micronized copper water based wood preservative systems are an alternate to the preservative systems identified in section 912 of the Standard Specifications for Construction, except on wood posts used for signing. Micronized copper water based wood preservative systems are proprietary systems used to treat timber and lumber for resistance to insect attack, decay, and rot. Proprietary micronized copper based wood preservative systems are evaluated by the International Code Council Evaluation Service, Inc (ICC-ES). This special provision covers the requirements for micronized copper azole (MCA) and micronized copper quaternary (MCQ).

b. Materials. ICC-ES requirements and specified commercial standards are incorporated herein by reference. Treated wood product reports issued by the ICC-ES as Evaluation Service Reports (ESRs) must be current as posted on the ICC-ES website www.icc-es.org and in compliance with AC326. The preservative(s) must not contain arsenic. The treated wood product's report must allow for the wood species and end use that is required by the project specifications. The Contractor must provide test data certification for each lot, that the treated timber and lumber meets the retention requirements of the current ESR for the appropriate AWPAs Use Category.

Condition and treat timber and lumber for above ground use to the minimum preservative retention in the ICC-ES evaluation report corresponding to AWPAs Use Category 4A (UC4A). Condition and treat timber and lumber for ground contact to the minimum preservative retention in the ICC-ES evaluation report corresponding to AWPAs Use Category 4B (UC4B).

Condition and treat all round posts, except northern white cedar, to the minimum preservative retention in the ICC-ES evaluation report corresponding to AWPAs Use Category 4B (UC4B).

Incorporation of timber and lumber treated to the preservative retention in AWPAs Use Category 3B (UC3B) or less is not permitted. Timber and lumber placed in violation of this special provision is cause for removal and replacement at the contractor's expense. No pay adjustments will be allowed for incorporation of timber and lumber treated to UC3B preservative retention. Removal is required.

c. Construction. Use stainless steel fasteners or hot dipped galvanized fasteners in accordance with ASTM A 653, batch or post-dipped process, with a minimum coating thickness of 1.85 oz of Zinc per square foot of surface area (G185). Do not mix fastener types. Do not use aluminum fasteners. Aluminum must not be in direct contact with treated wood. Non metallic spacers are to be used where contact with aluminum could occur.

d. Measurement and Payment. Payment is included in other items of work.

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
PAVEMENT MARKING MATERIALS

OPR:JGM

1 of 1

C&T:APPR:JAR:DBP:08-31-11
FHWA:APPR:08-31-11

Add the following immediately after the first paragraph of subsection 920.01, on page 890 of the 2012 Standard Specifications for Construction:

Use liquid applied pavement marking materials manufactured in the previous 12 months or within the shelf-life directed by the manufacturer, whichever is less. Use solid applied materials within the shelf-life directed by the manufacturer. Provide certification liquid and solid applied pavement marking materials have been stored per the manufacturer's requirements. Materials not in compliance will be rejected and removed at the Contractor's expense.

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
GLASS BEADS USED FOR PAVEMENT MARKINGS

DES:JGM

1 of 1

APPR:MWB:HZ:10-26-12
FHWA:APPR:11-05-12

Delete the second paragraph from subsection 920.02.A, on page 891 of the Standard Specifications for Construction in its entirety and replace it with the following:

Glass beads must meet the general requirements of subsection 920.02.B, and the applicable requirements for specific applications of subsection 920.02.C. All glass beads meeting subsections 920.02.B and 920.02.C to be used on Federal-aid projects must contain no more than 200 parts per million of arsenic or lead, as determined in accordance with Environmental Protection Agency testing methods 3052, 6010B, or 6010C.

ALLEGAN COUNTY ROAD COMMISSION

NOTICE TO BIDDERS

**PENALTY FOR CASTING OUT OF TOLERANCE
(SANITARY STRUCTURE)**

1 of 1

Wightman & Associates, Inc./AJN

01/24/2014

Description

In recent years, the County has noted an increase in the number of drainage structure covers and sanitary structure covers that must be adjusted after the final course of pavement has been placed. These castings, which are too low or too high, have to be cut out and reset. The resulting patch around such castings greatly detracts from the appearance and integrity of the new pavement. The County believes that Contractors now have, at their disposal, improved paving equipment. Adjusting rings will not be allowed for drainage structure covers. These technological improvements should further aid the Contractor in setting castings to the correct grade and matching them properly when paving. Failure to do so will no longer be acceptable and a penalty will be assessed for each patched casting.

Measurement and Tolerance

Each casting should be flush with, or slightly below, the level of the finished course of pavement. Measurement by the Engineer will be made on any casting that appears to be out of the accepted tolerance. Determination of whether a casting must be adjusted will be based upon the following criteria.

Castings Below Pavement Surface

A ten-foot (10') straight edge (provided by the Contractor) will be placed over the casting, parallel to the road centerline. Measurement will be made from the bottom of the straight edge to the raised portions on the cover of the casting. This distance shall be no greater than one-quarter inch (1/4"). Any measurement found over one-quarter inch (1/4") will rate the casting out of tolerance. The Engineer shall instruct the Contractor to adjust such a casting and a penalty will be assessed. The County will not pay for the original adjustment/reconstruction of this casting. Payment will be made one time only, after the casting has been reset properly.

Castings Above Pavement Surface

Because of potential damage to and from snowplow blades, castings protruding any distance above the level of finished pavement will be considered out of tolerance. The Engineer shall instruct the Contractor to adjust such a casting and a penalty will be assessed. The County will not pay for the original adjustment/ reconstruction of this casting. Payment will be made one time only, after the casting has been reset properly.

If a cover requires adjusting after the top course of HMA has been placed, the Contractor will be assessed a penalty of \$500.00 per cover and the item "Penalty For Casting Out Of Tolerance (Drainage Structure)" will be added to the contract.

ALLEGAN COUNTY ROAD COMMISSION

NOTICE TO BIDDERS

**PENALTY FOR CASTING OUT OF TOLERANCE
(WATER VALVE BOX)**

1 of 1

Wightman & Associates, Inc./AJN

01/24/2014

Description

In recent years, the County has noted an increase in the number of water valve boxes that must be adjusted after the final course of pavement has been placed (many are driven down during paving by heavy trucks). These boxes, which are too low or too high, have to be cut out and reset. The resulting patch around such castings greatly detracts from the appearance and integrity of the new pavement. The County believes that Contractors now have, at their disposal, improved paving equipment. Adjusting rings will not be allowed for water valve boxes. These technological improvements should further aid the Contractors in setting water valve boxes to the correct grade and matching them properly when paving. Failure to do so will no longer be acceptable and a penalty will be assessed for each patched valve box.

Measurement and Tolerance

Each valve box should be flush with, or slightly below, the level of the finished course of pavement. Measurement by the Engineer will be made on any casting that appears to be out of the accepted tolerance. Determination of whether a valve box must be adjusted will be based upon the following criteria.

Castings Below Pavement Surface

A ten-foot (10') straight edge (provided by the Contractor) will be placed over the valve box, parallel to the road centerline. Measurement will be made from the bottom of the straight edge to the raised portions on the cover of the valve box. This distance shall be no greater than one-half inch ($\frac{1}{2}$ "). Any measurement found over one-half inch ($\frac{1}{2}$ ") will rate the valve box out of tolerance. The Engineer shall instruct the Contractor to adjust such a valve box and a penalty will be assessed. The County will not pay for the original adjustment/reconstruction of this valve box. Payment will be made one time only, after the valve box has been reset properly.

Castings Above Pavement Surface

Because of potential damage to and from snowplow blades, valve boxes protruding any distance above the level of finished pavement will be considered out of tolerance. The Engineer shall instruct the Contractor to adjust such a valve box and a penalty will be assessed. The County will not pay for the original adjustment of this valve box. Payment will be made one time only, after the valve box has been reset properly.

If a valve box requires adjusting after the top course of HMA has been placed, the Contractor will be assessed a penalty of \$250.00 per valve box and the item "Penalty For Casting Our Of Tolerance (Water Valve Box)" will be added to the project.

Notice to Bidders

12NB01
1-3-2011

Insurance

The contractor shall provide for and in behalf of the State, the Commission, the Department and its officials, agents and employees, and all agencies and their employees, specifically named below, or as stated in the Insurance Requirements (Form 1304A, dated 05/2006), **an Owner's Protective Public Liability Insurance or the alternative option described in section 107.10 of the 2012 Standard Specifications for Construction, Indemnification, Damage Liability and Insurance.**

The agencies are the: Michigan Department of Transportation, Allegan County and the Allegan County Road Commission.

NOTICE TO BIDDERS

Michigan Department of Transportation Dissemination of Public Relations Information

Any public relations communications and/or products intended for an external audience pertaining to this Contract will not be made without prior written approval from MDOT, Office of Communications, and then only in accordance with explicit instructions by MDOT. This includes the use of the Michigan Department of Transportation (MDOT) logo.

Examples of communications and/or products may include, but are not limited to: brochures, flyers, invitations, programs, postings on social media sites or web sites, new or updated video, digital versatile disk (DVD) productions, or video sharing productions, exhibits, presentations, or any other printed materials intended for an external audience.

A violation of this provision will be considered a breach of this Contract and MDOT may terminate this Contract under the provisions of subsection 108.11 of the 2012 Standard Specifications for Construction.

Notice to Bidders
Joint/Two-Party Checks

12NB07
01/2008

Participants in a joint/two-party check arrangement must submit an *Application to Use Joint Checks* (MDOT Form 0183)

An acceptable joint check arrangement must include the following:

1. The prime contractor/payor can not require the subcontractor to use a specific supplier or the prime contractor's negotiated unit price.
2. The subcontractor is more than an extra participant in releasing the check to the material supplier;
3. The subcontractor (not the prime/payor) negotiates the quantities, price and delivery of materials;
4. The prime contractor/payor issuing the check acts solely as guarantor;
5. The subcontractor releases the check to the supplier;
6. The arrangement is short term (no more than two seasons) with the purpose being the subcontractor's establishment or increase of a credit line with the material supplier.
7. The subcontractor is responsible to both furnish and install the material/work item.

Copies of cancelled joint checks issued from prime/payor to a Disadvantaged Business Enterprise (DBE) and supplier will be submitted by mail, fax, or E-mail to the MDOT Office of Business Development upon request.

The Michigan Department of Transportation (MDOT) may review this project for compliance with subcontract requirements in general, including Disadvantaged Business Enterprise (DBE) requirements.

Michigan Department
of Transportation
0183 (10/07)

APPLICATION TO USE JOINT CHECKS

Return to MDOT's Office of Business Development two weeks prior to joint check transactions. MDOT Office of Business Development, P.O. Box 30050, Lansing, MI 48909, FAX (517) 335-0945 Email: MDOT-DBE@michigan.gov.

A joint check is a two-party check between a subcontractor, a prime contractor, and a materials supplier. Joint checks are used to guarantee payment to the supplier for materials used by the subcontractor. Typically, the prime contractor/payor issues a check as payor to the subcontractor and the materials supplier jointly to guarantee payment to the supplier for the materials/supplies used by the subcontractor. The use of joint checks in payment of materials/supplies is acceptable when the following conditions are met:

1. The joint check arrangement must be approved by the Michigan Department of Transportation;
2. The second party/payor (typically the prime contractor) acts solely as a guarantor;
3. The subcontractor must release the check to the supplier;
4. Use of joint checks is a commonly recognized business practice in the industry;
5. Copies of cancelled checks must be available for review by MDOT upon request.

| | | |
|---|-------------------|--|
| CONTRACT ID | CONTRACT LOCATION | |
| PAYOR Subcontractor Prime | TELEPHONE | |
| FAX | EMAIL | |
| SUBCONTRACTOR DBE Non-DBE | TELEPHONE | |
| FAX | EMAIL | |

PLEASE STATE THE REASON FOR USING JOINT CHECKS

| | | |
|-------------------------|--|----------|
| MATERIALS SUPPLIER NAME | DESCRIBE MATERIAL(S) AND QUANTITIES TO BE SUPPLIED | |
| ADDRESS | | |
| CITY | STATE | ZIP CODE |
| MATERIALS SUPPLIER NAME | DESCRIBE MATERIAL(S) AND QUANTITIES TO BE SUPPLIED | |
| ADDRESS | | |
| CITY | STATE | ZIP CODE |
| MATERIALS SUPPLIER NAME | DESCRIBE MATERIAL(S) AND QUANTITIES TO BE SUPPLIED | |
| ADDRESS | | |
| CITY | STATE | ZIP CODE |

(Attach additional pages as needed for materials suppliers)

By signing this application, we certify that information provided is true and accurate

| | | |
|---------------------------------------|-------|------|
| SUBCONTRACTOR AUTHORIZED SIGNATURE | TITLE | DATE |
| PRIME CONTRACTOR AUTHORIZED SIGNATURE | TITLE | DATE |
| MDOT AUTHORIZED SIGNATURE | 155 | DATE |

NOTICE TO BIDDERS

CERTIFIED PAYROLLS

Federal Prevailing Wage

Certified payrolls covering the contractor's and subcontractor's work forces shall be submitted to the engineer on federally funded projects as set forth in Title 29 of the Code of Federal Regulations, Part 3 (29 CFR 3), except these requirements shall not apply to any contract of \$2,000 or less, local force account projects, projects located on roadways classified as local or rural minor collectors, or projects located off the federal-aid highway system. Certified payrolls may be submitted in any form desired provided that all information requested on form WH-347 is included, and the statement of compliance has an original signature. The department has adopted a policy that requires only the last four digits of the employee's social security number to be reported on the certified payroll. Form WH-347 is available on the MDOT forms website.

State Prevailing Wage

Certified payrolls covering the contractor's and subcontractor's work forces shall be submitted to the engineer on all state funded projects as set forth in the Michigan Prevailing Wage Law, Public Act 166 of 1965, except on contracts involving two or more projects and job numbers where the type of funding is mixed, and where one source of funding is federal, the department puts only the wage rates issued by the U.S. Department of Labor in the proposal and the federal requirements apply to all work. The same payroll information is required on state funded projects as is required on federally funded projects, except only the last four digits of the employee's social security number are required to be reported.

Certified Payroll Submittal Requirements – Federal and State Prevailing Wage

Subcontractors and all lower tier subcontractors shall submit their certified payrolls to the prime contractor. The prime contractor will review all certified payrolls prior to submission to the engineer. The review will ensure the certified payroll complies with submittal requirements as set forth in the current written MDOT procedure for prevailing wage compliance oversight. The prime contractor will complete the Contractor Certified Payroll Report Form 1955 and submit to the engineer along with the certified payrolls on a weekly basis. Form 1955 is available on the MDOT forms website.

NOTICE TO BIDDERS

Multiple Wage Decisions

This proposal may contain multiple Davis-Bacon Wage Decisions. In order to clarify the work covered by each decision, the following explanations are offered:

General Decision MI120001 covers all airport construction, bridge construction, highway construction, and sewer and watermain work that are incidental to highway projects. The construction type indicated on this decision is "HIGHWAY (HIGHWAY, AIRPORT & BRIDGE xxxxx and SEWER/INCID. TO HWY.)". This wage decision is the most commonly used wage decision in MDOT's federally funded projects.

In accordance with the U.S. Department of Labor's All Agency Memorandums No. 130 and No. 131, multiple wage decisions will be included in those projects in which a second category of work is substantial in relation to project cost – more than approximately 20% or \$1,000,000. Sewer and watermain work (MDOT prequalification classification K) is considered to fall under the Heavy Construction work classification by the DOL, therefore when that work type is more than 20% of the engineer's estimate or \$1,000,000, the wage decision with the construction type "HEAVY CONSTRUCTION PROJECTS" will also be included in the proposal and is to be used for the sewer and watermain work in the proposal. All other work performed on the project will be covered by the "HIGHWAY (HIGHWAY, AIRPORT & BRIDGE xxxxx and SEWER/INCID. TO HWY.)" wage decision.

Also, when the landscape work (MDOT prequalification classification H) is more than 20% of the project cost or \$1,000,000, the "HEAVY CONSTRUCTION PROJECTS" wage decision will be included in the proposal to cover all landscape work. All other work performed on the project will be covered by the "HIGHWAY (HIGHWAY, AIRPORT & BRIDGE xxxxx and SEWER/INCID. TO HWY.)" wage decision. If the project is a total landscape project, only the "HEAVY CONSTRUCTION PROJECTS" wage decision will be in the proposal.

Rest area building projects will include the construction type "BUILDING" wage decision when the building portion of the work is more than 20% of the project cost or \$1,000,000. The other work performed on the project will be covered by the "HIGHWAY (HIGHWAY, AIRPORT & BRIDGE xxxxx and SEWER/INCID. TO HWY.)" wage decision and/or the "HEAVY CONSTRUCTION PROJECTS" wage decision (landscape and/or sewer and watermain work) if either or both are greater than 20% or \$1,000,000.

Although there is only one wage decision for "HIGHWAY (HIGHWAY, AIRPORT & BRIDGE xxxxx and SEWER/INCID. TO HWY.)", work (MI120001), the "HEAVY CONSTRUCTION PROJECTS" and "BUILDING" wage decisions vary from county to county.

NOTICE TO BIDDERS
LABOR COMPLIANCE

Each prime contractor and all tiers of subcontractors shall comply with all labor compliance provisions in the contract and as specified in the current written MDOT procedure for prevailing wage compliance oversight. The prime contractor shall take responsibility for subcontractor and lower tier subcontractor labor compliance.

Prime contractors and all tiers of subcontractors are required to pay no less than the wage rates and fringe benefits required by federal or state law, as applicable. The rates of wages and fringe benefits to be paid to each class of construction laborers and mechanics (each employee covered by the prevailing wage requirements) by the prime contractor and by all tiers of subcontractors, shall not be less than the total combination of the wage and fringe benefit rates in the attached wage schedule(s) for the locality in which the work is to be performed. This notice shall be included in every subcontract and every subcontractor shall require that this notice be included in each succeeding tier of subcontracts.

Every prime contractor shall keep posted on the construction site, in a conspicuous place, a copy of all prevailing wage and fringe benefit rates included in the contract.

The prime contractor and every subcontractor shall actively pursue resolution of contract labor compliance issues and attend all contract labor compliance meetings and hearings. The prime contractor and subcontractor shall submit all department requested documentation within the time frame the department specifies in the written notice. All labor compliance issues are to be resolved within 60 days after receiving the department's first written notice. The department and the contractor can mutually agree in writing to extend this 60 day requirement.

The prime contractor and every subcontractor shall keep an accurate record indicating the name and classification and the actual wages and benefits paid to each employee in connection with the contract. This record shall be available for inspection by the department or its representative. The prime contractor and subcontractor must permit the department or its representative to interview employees during working hours on the project and they must advise employees that they must cooperate with department representatives during wage rate interviews.

The prime contractor is responsible for advising all subcontractors of the requirement to pay the prevailing rate prior to commencement of work and that all employees must cooperate during wage rate interviews.

Each subcontractor is liable for the payment of the prevailing rates to its employees.

The prime contractor is liable for the payment of the prevailing rates to its employees. The prime contractor is also liable for payment of prevailing rates that are not paid by their subcontractors.

A violation of state and/or federal prevailing wage laws may result in the debarment of a contractor from being awarded a contract or subcontract for the provision of goods and services to the State of Michigan for a period of up to eight (8) years. Furthermore, other actions, including, but not limited to reconciliation of records, and restitution of employees, included in state and federal laws, may be required of the contractor/subcontractor.

NOTICE TO BIDDERS

BID RIGGING

To report bid rigging activities call:

1-800-424-9071

The U.S. Department of Transportation (DOT) operates the above toll-free "hotline" Monday through Friday, 8:00 a.m. to 5:00 p.m., Eastern Time. Anyone with knowledge of possible bid rigging, bidder collusion, or other fraudulent activities should use the "hotline" to report such activities.

The "hotline" is part of the DOT's continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

NOTICE TO CONTRACTORS/CONSULTANTS

Fraud and Abuse Hotline

The Michigan Department of Transportation (MDOT) has established a Fraud and Abuse Hotline for employees, contractors, consultants, and others to report suspected fraud or abuse, such as: prevailing wage non-compliance, theft, kickbacks, wrongful claims, contract fraud, use of materials that do not comply with specifications, unapproved substitution of materials, commodities, or test samples, or failure to follow contract procedures.

Anyone with knowledge of any activity involving the potential for fraud or abuse is requested to call the Hotline at (toll free) **1-866-460-6368** or **517-241-2256**.

MICHIGAN DEPARTMENT OF TRANSPORTATION

NOTICE TO BIDDERS

ROAD CONSTRUCTION APPRENTICESHIP READINESS (RCAR) PROGRAM

All bidders are advised of Section 1920(b) of SAFETEA-LU, which states:

“It is the sense of Congress that Federal transportation projects should facilitate and encourage the collaboration between interested persons, including Federal, State, and local governments, community colleges, apprentice programs, local high schools, and other community-based organizations that have an interest in improving the job skills of low-income individuals, to help leverage scarce training and community resources and to help ensure local participation in the building of transportation projects.”

In an effort to improve the job skills of women, minorities and low-income individuals and to help ensure local participation in the building of transportation projects, MDOT and the Department of Labor & Economic Growth in cooperation with local Michigan Works! Agencies have implemented a Road Construction Apprenticeship Readiness (RCAR) program.

The RCAR program, launched in April 2008, is a new and ambitious program designed to equip a diverse pool of Michigan residents with skills for sustainable employment in the road construction industry. The RCAR program included a rigorous, five to six week training component designed to teach and prepare individuals for road construction apprenticeships. In addition to receiving 150 to 180 hours of training in job readiness, applied math, computers, blueprint reading and workplace safety, participants also underwent an entrance assessment, a physical exam and a drug test.

All bidders are hereby informed that a pool of RCAR graduates are available from which to draw potential employees for work on this federal-aid project. RCAR graduates are prescreened, ready to work and can be used to fill MDOT assigned On-the-Job Training slots.

For information regarding RCAR graduates, contact:

Metro Region

Clarence Burton
Michigan Works!One Stop
455 W. Fort St.
Detroit, MI 48226
(313) 962-9675 Ext. 527
(313) 962-4884 FAX
cburton@detroitmi.gov

Cheryl Sanford
Michigan HRDI
13700 Woodward, Highland Park.
(313) 826-0299.
(313) 866-1601 FAX
csanford@semca.org

Robert E. Shimkoski Jr.
Detroit Workforce Development Department, a Michigan Works! Agency
707 W. Milwaukee Detroit, MI 48202
(313) 876-0584 Ext. 217
(313) 876-0585 FAX
Rshimkoski@detroitmi.gov

Southwest Region

Cincy Sullivan/Fred Harvey/Curt Mastos
Kalamazoo-St. Joseph Michigan Works! Service Center
1601 S. Burdick St.
Kalamazoo MI 49001
(269) 383-2536 Ext. 117/112/132
(269) 383-3785 FAX
csulliva@kresanet.org

Bay Region

Kristen Wenzel
Saginaw Midland Bay Michigan Works!
Northpointe Plaza
4061 North Euclid
Bay City, MI 48706
(989) 667-0500
(989) 684-7920 FAX
wenzelk@bst.michiganworks.com

Notice To Bidders

Use of Crushed Concrete for Dense- and Open-Graded Aggregates and Granular Material

Pursuant to the Special Provision for Crushed Concrete Near Water, included elsewhere in the contract documents, the use of crushed concrete for dense-graded aggregate, open-graded aggregate and granular material is prohibited within 100 feet of a water course or lake.

The estimated amount of material and the location (in stations), by pay item, affected by this prohibition is:

Sta 15+70 to 17+80:

Aggregate Base = 433 Ton

Shoulder, CI II, 5 inch = 140 Syd

Approach, CI I, 6 inch, Modified = 196 Syd

Sta 46+55 to 48+85:

Aggregate Base = 475 Ton

Shoulder, CI II, 5 inch = 150 Syd

Approach, CI I, 6 inch, Modified = 190 Syd

Approach, CI II = 15 Ton

NOTICE TO BIDDERS

BUY AMERICA

Every effort has been made by the Michigan Department of Transportation to ensure this project can be constructed in accordance with 23CFR635.410 (Buy America). Iron and steel products have been investigated prior to advertising. Items specified in the bidding documents may contain minimal amounts of foreign steel and/or iron that the contractor must consider for Buy America compliance.

CONSTRUCTION COORDINATION CLAUSE

Wightman & Associates, Inc./AJN

01/24/2014

Description

In addition to the Division Street Reconstruction Project, there are other projects located in the immediate area.

1. 142nd Avenue/Division Street Intersection Improvements – Allegan County Road Commission will be reconstructing the intersection of 142nd Avenue and Division Street in summer 2014. The project is anticipated to start upon completion of Stage 1 on Division Street so as to minimize impact to the detour route. This project will include the complete reconstruction of the intersection with a new concrete surface.

Cooperation by CONTRACTOR

Allegan County Road Commission, Kent County Road Commission, and Michigan Department of Transportation maintenance crews and/or Contract Agencies may perform maintenance work within or adjacent to the Construction Influence Area (CIA). This work will be coordinated with the Contractor through the Engineer for the local agency to minimize interference. No additional payment will be made to the Contractor for the joint use of traffic control items.

The Contractor shall conduct the operations so as to interfere as little as possible with those of other Contractors, utilities, or any public authority on or near the work as shown on the plans or in the proposal. The Owner reserves the right to perform other work by contract or otherwise, and to permit public utility companies and others to do work on or near the project during progress of the work. The Contractor shall conduct the work and shall cooperate with such other parties so as to cause as little interference as possible with their operations and as the Engineer may direct. No additional compensation will be paid to the Contractor for any reasonable delay or inconvenience due to material shortages or reasonable delays due to the operations of such other parties doing the work indicated or shown on the plans or in the proposal, or for any reasonable delays on construction due to the encountering of existing utilities that are shown on the plans.

ALLEGAN COUNTY ROAD COMMISSION

NOTICE TO BIDDERS

UTILITY COORDINATION

1 of 2

Wightman & Associates, Inc./AJN

1/24/2014

The Contractor shall cooperate and coordinate construction activities with the owners of utilities as stated in Section 104.08 of the 2012 MDOT Standard Specifications for Construction. In addition, for the protection of underground utilities, the Contractor shall follow the requirements in Section 107.12 of the 2012 MDOT Standard Specifications for Construction. Contractor delay claims, resulting from a utility, will be determined based upon Section 109.05.E of the 2012 MDOT Standard Specifications for Construction.

Public Utilities

The following Public Utilities have facilities located within the right-of-way:

Electric: Consumers Energy, 4000 Clay Avenue SE, Grand Rapids, MI 49548
Mr. Chris Schrock, (616) 530-4097

Telephone: AT&T, 955 – 36th Street SE, Grand Rapids, MI 49508
Mr. Cory VanTil, (616) 246-7573

Gas: Michigan Gas Utilities, 1708 Eaton Drive, Grand Haven, MI 49417
Mr. Todd Subka, (616) 844-7519

Sewer: Dorr-Leighton Sewer, 4402 South Division, Moline, MI, 49335
Mr. Joe Baxter, (616) 877-4196

Main Office, 4475 Kalamazoo Drive, Caledonia, MI 49316
Ms. Tammy VanHaitsma, (616) 795-2256 (cell)

Water: Dorr-Leighton Water Works, 1165 142nd Avenue, Wayland, MI 49348
Mr. Bruce Morren, (616) 877-4000

The Contractor shall call “Miss Dig” a minimum of 3 working days prior to beginning construction operations. Saturday, Sundays and Holidays shall not be included as a working day. On all projects:

“3 Days before you Dig – Call Miss Dig – Toll Free” 811.

The owners of existing service facilities that are within grading or structure limits will move them to locations designated by the Engineer or will remove them entirely from the highway right-of-way. Owners of the Public Utilities will not be required by the Road Commission to move additional poles or structures in order to facilitate the operation of construction equipment unless it is determined by the Engineer that such poles or structures constitute a hazard to the public or are extraordinarily dangerous to the Contractor’s operations.

No additional compensation will be paid to the CONTRACTOR for delays due to material shortages or other reasons beyond the control of the Road Commission, or for delays on construction due to the encountering of existing utilities that are shown on the plans.

Work stoppages by employees of utility companies which results in a delay of utility revisions on any portion of this project may be considered the basis for a claim for an extension of time for completion, but will not be considered the basis for a claim for extra compensation or an adjustment in contract unit prices.

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SUPPLEMENTAL SPECIFICATION
FOR
ERRATA TO THE 2012 STANDARD SPECIFICATIONS

1 of 19

09-26-13

| Page | Subsection | Errata |
|------|------------|--|
| 4 | 101.02 | <p>Delete the following abbreviations and the long forms MDELEG MDNRE</p> <p>Add the following abbreviations and the long forms MDNR Michigan Department of Natural Resources MDEQ Michigan Department of Environmental Quality MDLARA Michigan Department of Licensing and Regulatory Affairs NESC National Electrical Safety Code</p> |
| 27 | 103.02.B.2 | Change the last sentence of the first paragraph to read "For decreases below 75 percent, the maximum allowable payment for work performed, including any adjustment, will not exceed an amount equal to 75 percent of the original contract quantity times the contract unit price." |
| 34 | 104.05 | The first sentence of this subsection should read "If the Contractor performs unauthorized work (work performed without the inspections required by the contract, extra work performed without Department approval, work performed contrary to the inspectors direction, or work performed while under suspension by the inspector), the Engineer may reject the unauthorized work." |
| 46 | 104.12 | Add the following to the end of the first paragraph "The use of right-of-way in wetlands and floodplains, or the crossing of water courses by construction equipment is prohibited." |
| 53 | 105.09 | Add the following to the end of the second paragraph "Any specifically produced material not purchased by the Department, will remain the Contractors and must be removed from the project prior to final acceptance." |
| 56 | 107.02.B.2 | This sentence should read "U.S.Army Corps of Engineers' Section 404, Dredge and Fill; and Section 10, Navigable Waterway." |
| 56 | 107.02.B | <p>Add the subsection reading as follows: 3. U.S. Coast Guard Section 9, Navigable Waterway.</p> <p>Change "MDNRE" to "MDEQ" in this subsection.</p> |

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| 65 | 107.15.A | Change "MDNRE" to "MDEQ" in four instances in this subsection. |
| 66 | 107.15.A.3 | Add the following to the end of the paragraph "Note that a burn permit from the MDNR is required for any open burning whenever the ground is not snow covered. Any individuals that allow a fire to escape will be in violation of the Natural Resources and Environmental Protection Act and will be required to reimburse the costs of suppressing the wild fire." |
| 67 | 107.16 | The third sentence should read "In State Forests, the Contractor must contact the local Unit Manager, Forest Management Division, MDNR, regarding the work to be performed within or adjacent to the forest land." Delete the last sentence of the first paragraph on this subsection. |
| 112 | 201.03.A.3.b | Change "MDNRE" to "MDNR" in three instances in this subsection. |
| 150 | 208.01 | Change "MDNRE" to "MDEQ" in this subsection. |
| 188 | 401.03.H | Change the second sentence of the paragraph to read "Jack steel pipes in place in accordance with subsection 401.03.G". |
| 189 | 401.03.N | Add the following sentence to the end of the first paragraph "Where possible, maintain the stream flow thru a temporary channel or temporary culvert." The second sentence of the second paragraph should read "Direct water from the dewatering operations through a filter bag before discharging to an existing drainage facility." |
| 190 | 401.04 | Change the fourth pay item from the end of the list to read as follows: Steel Casing Pipe, __ inch, Tr Det __. |
| 201 | 402.04.H | Change the last sentence of the first paragraph to read "The Department will not make an adjustment in the pay items of Minor Traffic Devices or Traffic Regulator Control ." |
| 223 | 406.03.G | Add the following after the first sentence of the second paragraph: Where possible, maintain the stream flow thru the existing channel, temporary channel, or temporary culvert. |
| 224 | 406.03.G | Replace the fifth paragraph of this subsection with the following: The Contractor may use cast-in-place wing walls, headwalls, and aprons, as alternatives to precast wing walls, headwalls, and aprons. Attach cast-in-place wing walls or headwalls as shown on the shop drawings. |
| 226 | 406.04.A | Add the following paragraph after the last paragraph of the subsection: |

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| | | The Contractor must use approved MDOT service vendors qualified in Hydraulics, Geotechnical Engineering Services, and Short and Medium Span Bridges to perform the required design and plan modifications, as directed by the Engineer, if the Contractor selects a culvert shape different than shown on the plans. |
| 227 | 406.04.B | Delete the first and second paragraphs following the list of items in this subsection and replace with the following: The Department will pay separately for cast-in-place concrete, other than for culvert segments, wing walls, and headwalls; excavation; protective coating; providing and placing backfill material; by plan quantity in accordance with subsection 109.01.A. |
| 239 | 501.03.C.6 | The first sentence of this subsection should read "Except as specified in subsection 501.03.C.4, removing HMA surface applies to removing HMA overlying a material designated for removal or that is required to remain in place." |
| 249 | 501.04.H | The first sentence of this subsection should read "The Engineer will measure, and the Department will pay for removing HMA surface, no greater than 12 inches thick, overlying a material designated for removal or that is required to remain in place, as HMA Surface, Rem. " The second paragraph of this subsection should read "The Engineer will measure, and the Department will pay for removing HMA surface, greater than 12 inches thick, overlying a material designated for removal or that is required to remain in place, as Pavt, Rem in accordance with subsection 204.04." |
| 257 | 503.03.E | Delete this subsection in its entirety. |
| 265 | 504.03.E.3 | Delete this subsection in its entirety. |
| 269 | 504.04.A | This subsection should read "The unit prices for Micro-Surface , regardless of the type required, include cleaning existing pavement; applying a bond coat; temporary pavement markings; stationing; corrective action; and traffic control to complete corrective action." |
| 308 | 602.03.F | Note c. in Table 602-1 should read "Refer to Section D6 of the Materials Quality Assurance Procedures Manual for inspection procedure." |
| 320 | 602.04.C.3 | The last paragraph in this subsection should read "If the Engineer approves a substitution of a higher concrete grade for a lesser grade (e.g., P1 for P2), the Department will pay for the higher grade of concrete using the original bid and pay items of the lesser grade." |
| 327 | 603.02 | Change the third material in the list to read: Base Course Aggregate, 4G, 21AA, 22A.....902 |

An asterisk (*) indicates an entry which has been revised from an earlier version of this Supplemental Specification.

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| 334 | 603.03.B.10 | Change the last sentence of the second paragraph to read "Apply the required curing compound in two coats, at a rate of at least 1 gallon per 25 square yards for each coat." |
| 351 | 701.04 | Replace Tables 701-1A and 701-1B with the Table 701-1 below. |
| 372 | 705.03.C.1 | Add the following sentence after the first paragraph of this subsection: Do not drive piles within a radius of 25 feet of newly placed concrete until the concrete attains at least 75 percent of its specified minimum strength. |
| 374 | 705.03.C.2.c | Change the last sentence of the second paragraph to read "Drive test piles to the minimum pile length or practical refusal, whichever is greater". |
| 379 | 705.04 | Change the fifth item down the list to read: Pile, Galv (Structure No.) |
| 380 | 705.04 | Change the last item in the list to read: Pile Driving Equipment, Furn (Structure No.) |
| 383 | 706.02 | The fourth paragraph following the list of materials should read "Provide AASHTO M 270, Grade 36 steel, meeting the requirements of ASTM A 786, galvanized in accordance with section 707, for expansion joint cover plates. Provide plates at least 3/8 inch thick. Use plates with a slip resistance equal to or greater than those meeting the requirements of ASTM A 786 and must be approved by the Engineer. Provide ASTM F 593 (Type 304) stainless steel, 3/4-inch or 1/2-inch diameter, flathead countersunk screws with 3/4-inch or 1/2-inch diameter inserts for use in expansion joint cover plates." |
| 389 | 706.03.D.4.b | Change the first sentence of the fourth paragraph to read "Design forms, form supports, and attachments to carry dead loads, and resultant horizontal loads due to forming of cantilever overhangs." |
| 414 | 707.01.B | Change the last sentence of the first paragraph to read "For horizontally curved or continuous span or cantilevered span girders the Engineer will consider intermediate cross frames and connection plates and stiffeners as primary members." |
| 430 | 707.03.D.7.b | Change "ASTM" to "AASHTO" in the title of the Table 707-4. |
| 430 | 707.03.D.7.b | Change "104,000" to "103,000" in the last row under the column titled Minimum Bolt Tension. |
| 441 | 708.03.A.11 | Change the last sentence of the first paragraph to read "Cure concrete at temperatures from 70 °F to 150 °F until concrete attains the release strength shown on the shop plans". |

| Page | Subsection | Errata |
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| 441 | 708.03.A.11 | Change the fourth sentence of the fourth paragraph to read "Do not exceed a maximum concrete temperature of 150 °F during the curing cycle." |
| 461 | 711.04.F | The title of this subsection should read " Reflective Marker, Permanent Barrier. " |
| 467 | 712.03.C | Add the following to the end of the third paragraph of the subsection: Notify the Engineer of any saw cuts in the top flange. Saw cuts equal to or less than 1/32 inch deep in steel beams must be repaired by grinding, to a surface roughness no greater than 125 micro-inches per inch rms, and tapering to the original surface using a 1:10 slope. Saw cuts in excess of 1/32 inch deep in steel beams require a welded repair to be submitted to the Engineer for approval. Weld in accordance with subsection 707.03.D.8 and provide adequate notice to allow the Engineer to witness the repair work. Inspect and test all saw cut repairs (including grinding repairs) using ultrasonic testing in accordance with 707.03.D.8.c at no additional cost to the Department. |
| 471 | 712.03.J.1 | Delete the first paragraph in this subsection and replace it with the following: Propose complete details of drilling, cleaning, and bonding systems for anchoring reinforcement and submit for the Engineer's approval before use. The minimum embedment depth must be nine times the anchor diameter for threaded rod or bolt and twelve times the anchor diameter for reinforcing bar. Propose a drilling method that does not cut or damage existing reinforcing steel. Prepare at least three proof tests per anchor diameter and type in the same orientation in which they will be installed on the existing structure, on a separate concrete block, in the presence of the Engineer. The Engineer will proof test the proposed systems. The Engineer will base approval of the anchoring system on the following criteria: |
| 473 | 712.03.L.3 | Delete the existing first sentence in the first paragraph. |
| 473 | 712.03.L.3 | Change the third sentence of the first paragraph to read "Provide two test splices on the largest bar size." |
| 488 | 713.02 | Add the following as subsection 713.02.C: "C. Structural Steel for Retrofitting and Welded Repairs. Structural steel material used for retrofitting and welded repairs of primary members as defined in subsection 707.01.B must meet longitudinal Charpy V-Notch impact test requirements." |
| 521 | 717.04.B | This subsection should read "The unit price for Drain Casting Assembly includes the cost of providing and installing the downspout and, if necessary, the lower bracket to the drain casting." |
| 522 | 718.02 | Change the section number "906" in the third material in the list to read "919." |

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| 533 | 718.04 | Delete the following pay item from the list: Temp Casing.....Foot |
| 533 | 718.04.B.2 | Delete this subsection in its entirety. |
| 533 | 718.04.B.3 | Renumber this subsection as follows: 2. Permanent Casing. |
| 540 | 802.04 | Change "Non reinf" in the last pay item of the list with "Nonreinf". |
| 545* | 803.04.E | Change the second sentence of the second paragraph to read: The unit price for Railing for Steps includes the cost of providing, fabricating, installing, and grouting the railing. |
| 569 | 809.04.A | Change the first sentence to read: The unit price for Field Office, CI ___ includes the cost of setup, providing access, grading, maintaining, plowing snow, and utility hook-up charges. |
| 570 | 809.04.B | Delete the existing second and third sentences in the first paragraph and replace them with the following: The unit price for Field Office, Utility Fees includes the cost of monthly usage fees for electricity, gas, telephone service and charges, fuel for the stove, monthly water and sanitary service. |
| 570 | 809.04.B | Change the existing fourth sentence in the first paragraph to read: The Department will reimburse the Contractor for monthly usage fees for electricity, gas, telephone, water and sanitary charges incurred by the Department. |
| 575 | 810.03.K | Change the subsection to read "K. Drilled Piles for Cantilever and Truss Foundations. Construct drilled piles for cantilever and truss foundations in accordance with section 718." |
| 584 | 810.04 | Delete the last pay item in the list: Truss Fdn Anchor Bolts, Replace.....Each |
| 596 | 811.03.G | Delete this subsection in its entirety. |
| 597* | 811.03.H | Rename this subsection as follows: G. Raised Pavement Marker (RPM) Removal. |
| 597* | 811.04 | Change "Crosshatching" in the last pay item of the list on this page to "Cross Hatching". |
| 598 | 811.04 | Delete the following pay items from the list: Pavt Mrkg, (material), 4 inch, SRSM, (color).....Foot Pavt Mrkg, (material), 4 inch, SRSM, 2 nd Application, (color).....Foot |

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| | | <p>Add the following pay items to the list:</p> <p>Pavt Mrkg, Polyurea, (legend).....Each</p> <p>Pavt Mrkg, Polyurea, (symbol).....Each</p> <p>Change the sixth item down the list to read:</p> <p>Pavt Mrkg, Polyurea, __ inch, Cross Hatching, (color)</p> <p>Change the last item in the list to read:</p> <p>Witness, Log, Layout, \$1000.00</p> |
| 599 | 811.04.B | Delete this subsection in its entirety. |
| 599 | 811.04 | <p>Rename the following subsections as follows:</p> <p>B. Call Back.</p> <p>C. Pavement Marking Removal.</p> <p>D. Material Deficiency.</p> |
| 602 | 812.03.D | Change the first sentence to read "Provide and maintain traffic control devices meeting the requirements in the ATSSA Quality Guidelines for Work Zone Traffic Control Devices and Features." |
| 603 | 812.03.D.1 | The last sentence on this page should read "Lay the sign behind the guardrail, with the uprights pointing downstream from the traffic, and place the support stands and ballasts close to the guardrail." |
| 604 | 812.03.D.2 | The first sentence of the fourth paragraph should read "Do not use burlap or similar material to cover Department or Local Government owned signs." |
| 604 | 812.03.D.5 | The fifth sentence of the first paragraph should read "Do not mix drums and cones within a traffic channeling sequence." |
| 605 | 812.03.D.6.b | <p>Change the first sentence of the first paragraph to read:</p> <p>The Department will allow the nighttime use of 42-inch channelizing devices, in the tangent area only, on CPM and pavement marking of any duration where the use of plastic drums restricts proposed lane widths to less than 11 feet, including shy distance.</p> |
| 605 | 812.03.D.7 | <p>Add the following sentence after the first sentence of the first paragraph:</p> <p>Place a shoulder closure taper in advance of the lighted arrows placed on the shoulders.</p> |
| 607 | 812.03.D.9 | Delete the second paragraph of this subsection and replace with the following: Link sections together to fully engage the connection between sections. Maintain the barrier with end-attachments engaged and within 2 inches of the alignment shown on the plans. |
| 608 | 812.03.D.10.b | Add the following sentence after the first paragraph of this subsection: |

An asterisk (*) indicates an entry which has been revised from an earlier version of this Supplemental Specification.

| Page | Subsection | Errata |
|-------------|-------------------|---|
| | | Use an NCHRP 350, Test Level 3, or MASH accepted attenuation system. |
| 608 | 812.03.D.10.b | Delete the second sentence of the second paragraph of this subsection beginning with "Install sand module attenuators..." |
| 608 | 812.03.D.10.b | Add the following sentence after the second paragraph of this subsection: Install impact attenuation devices as shown on the plans, as directed by the Engineer, or both. |
| 609 | 812.03.D.10.d | Add the following sentence after the first paragraph of this subsection: Use an NCHRP 350, Test Level 3, or MASH accepted attenuation system. |
| 610 | 812.03.D.11.a | Change "Type R tape" to read "Type R marking" in three locations in this subsection. |
| 613 | 812.03.D.14.a.iii | Change the sentence in this subsection to read "Place an ET Type or SKT Type extruder guardrail ending on both blunt guardrail ends." |
| 615 | 812.03.F | The second sentence of the second paragraph of this subsection should read "The Contractor may use a Type R temporary pavement marking cover, per subsection 812.03.D.12 when authorized by the Engineer." |
| 616 | 812.03.F.2 | The last sentence of the first paragraph should read "If the removal equipment cannot collect all removal debris, operate a self-propelled sweeper capable of continuously vacuuming up the removal debris immediately behind the removal equipment." |
| 617 | 812.03.G.3 | The first sentence of the second paragraph should read "Sweep the shoulder and remove debris prior to placing traffic on the shoulder and throughout the time the shoulder is used to maintain traffic." |
| 617 | 812.03.G.4.a | Delete "48 inch by 48 inch" from the first sentence of this subsection. |
| 618* | 812.03.G.7 | The first sentence of the first paragraph should read "Clean barrier reflectors, plastic drums, 42 inch channelizing devices, tubular markers, signs, barricades, and attached lights in operation on the project to ensure they meet required luminosity." |
| 619 | 812.03.G.8 | The second sentence of the third paragraph from the end of the subsection should read "Illuminate traffic regulator stations at night per subsection 812.03.H." |
| 621 | 812.03.I.6 | Delete "48 inch by 48 inch" from the second sentence of this subsection. |

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| 622* | 812.03.J | The second paragraph should read "Apply one 2-inch wide horizontal stripe of red and white conspicuity tape along at least 50 percent of each side of, and across the full width of the rear of the vehicle or equipment." |
| 622 | 812.04 | Change the second item down the list to read: Traf Regulator Control |
| 626 | 812.04.I | Change the reference "812.04.E" in the first sentence to "812.04.D". |
| 628 | 812.04.M.4 | Add the following as the first sentence of this subsection: The Engineer will not measure a temporary barrier ending move as Conc Barrier Ending, Temp, Relocated if it involves work defined in subsection 812.04.M.3. |
| 629 | 812.04.N.1 | Change the reference "811.04.D" in the second paragraph of this subsection to read "811.04.C". |
| 630 | 812.04.S | Change the first sentence to read "The Department will not make additional payments for traffic regulating, signing, arrow boards, and lighting systems for traffic regulator stations operated at night due to a temporary PTS system failure." |
| 634 | 813.03.C.3 | Change the reference "903.07.A" in the paragraph of this subsection to read "907.07.B". |
| 650 | 816.03.B | Delete the first paragraph of this subsection and replace with the following: "Conduct soil tests when called for in the contract or when directed by the Engineer. Provide soils tests results to the Engineer when testing is required. Provide and place fertilizer as indicated below and as indicated in the soils tests, if required." |
| 650 | 816.03.B.1 | Change the sentence to read "For Class A fertilizer, evenly apply 176 pounds of chemical fertilizer nutrient per acre on a prepared seed bed." |
| 650 | 816.03.B.2 | Change the sentence to read "For Class B fertilizer, evenly apply 120 pounds of chemical fertilizer nutrient per acre on a prepared seed bed." |
| 650* | 816.03.B.3 | Change the sentence to read "For Class C fertilizer, evenly apply 80 pounds of chemical fertilizer nutrient per acre on established turf." |
| 678 | 819.04 | Change the last item in the list on this page to read: DB Cable, in Conduit, 600 Volt, (number), 1/C# (size)Foot |
| 688 | 820.03.C | Change the seventh paragraph of this subsection to read: |

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| | | Tighten top anchor bolt nuts, snug, in accordance with the first four paragraphs of subsection 810.03.N.2, except beeswax will not be required. |
| 696 | 820.04 | Add the following pay items to the list: Pedestal, Pushbutton, Alum.....Each Pedestal, Pushbutton, Rem.....Each |
| 698 | 820.04.B | Delete the second paragraph of this subsection found on this page. |
| 698 | 820.04.C | Change " Fdns " to read " Fdn " in four instances in this subsection. |
| 701 | 820.04.J.3 | Change the sentence to read "Installing wires in the saw slots and to the handholes;" |
| 701. | 820.04.J | Add the following as a new subsection: 7. A 3/4 inch minimum flexible conduit (non-metallic and rated for underground use) from the pavement to the handhole. |
| 706 | 821.01.B | Change the website address listed after the second paragraph on this page to read: http://www.ngs.noaa.gov/heightmod/GuidelinesPublications.shtml |
| 711 | 822.03.B | Change the second paragraph to read: If corrugations are required on concrete shoulders and the method of installation is not shown on the plans or directed by the Engineer, construct corrugations by grinding, or cutting. |
| 720 | 823.04 | Change the pay item seventh from the bottom of the list to read: Water Shutoff, Adj, Temp, Case __ |
| 732 | 824.04 | Change the first sentence of the first paragraph following the list of pay items to read: If the Engineer determines the Contractor will perform staking as extra work, the Department will pay for staking in accordance with section 103. |
| 742 | 902.03.C.1.a | Change the sentence to read: Coarse aggregate includes all aggregate particles greater than or retained on the 3/4-inch sieve. |
| 742 | 902.03.C.2.a | Change the sentence to read: Intermediate aggregate includes all aggregate particles passing the 3/4-inch sieve through those retained on the No. 4 sieve. |
| 746* | 902.11 | Change the Item of Work by Section Number column in Table 902-1 for the 6AA row to read "406, 601, 602, 706, 708, 806". Change the Item of Work by Section Number column in Table 902-1 for the 6A row to read "205, 401, 402, 406, 601, 602, 603, 706, 806". |

An asterisk (*) indicates an entry which has been revised from an earlier version of this Supplemental Specification.

| Page | Subsection | Errata |
|------|--------------|--|
| | | Change the Item of Work by Section Number column in Table 902-1 for the 34R row to read "401, 404, 406". |
| 751 | 902.11 | Replace Table 902-6 with the Table 902-6 below. |
| 761 | Table 904-2 | Delete the footnote f and any other reference to footnote f from the table. |
| 767 | 905.03 | Change the first sentence of the first paragraph to read "Deformed bars, must meet the requirements of ASTM A 706, ASTM A 615, or ASTM A 996 (Type R or Type A only) for Grade 60 steel bars, unless otherwise required". |
| 767 | 905.03 | Change the first sentence of the second paragraph to read "Unless otherwise specified, spiral reinforcement must meet the requirements of plain or deformed Grade 40 steel bars of ASTM A 615, ASTM A 996 (Type A), or the requirements of cold-drawn wire of ASTM A 82". |
| 767 | 905.03 | Change the first sentence of the third paragraph to read "Bar reinforcement for prestressed concrete beams must meet the requirements of ASTM A 996 (Type R) for Grade 60 steel bars, except the Engineer will allow bar reinforcement that meets the requirements of ASTM A 615 or ASTM A 996 (Type A) for Grade 40 steel bars for stirrups in prestressed concrete beams". |
| 768 | 905.05 | Change the first sentence of the first paragraph to read "Deformed steel bars must meet the requirements of ASTM A 706 or the requirements for Grade 40, Grade 50, or Grade 60 of ASTM A 615 or ASTM A 996 (Type R or Type A only)". |
| 772 | 906.08 | Change the last sentence of the first paragraph to read "Washers must be made from austenitic stainless steel ASTM A 276 UNS designation S31600 or S31603." |
| 777* | 907.03.D.2.a | Change the first sentence of the second paragraph to read: Angle sections must be nominal 2½ inch by 2½ inch by ¼ inch. |
| 777* | 907.03.D.2.b | Change the first sentence of the first paragraph to read: Angle section braces must be nominal 1¾ inch by 1¾ inch by ¼ inch or nominal 2 inch by 2 inch ³ / ₁₆ inch. |
| 783 | 908.09.A | Change the title of this subsection and the first sentence to read " A. Base Plates, Angle, and Non-Tubular Post Elements. Galvanized base plates, angle, rail splice elements, and non-tubular post elements must meet the requirements of ASTM A 36 and ASTM A 123". |
| 783 | 908.09.B | Change the title of this subsection and the first sentence to read |

| Page | Subsection | Errata |
|------|------------|---|
| | | “B. Rail Elements and Tubular Post Elements. Rail elements and tubular post elements must meet the requirements of ASTM A 500, for Grade B and subsection 908.09.B and be galvanized in accordance with ASTM A 123”. |
| 787 | 908.14.B | Change the second sentence of the fourth paragraph to read “After coating, the maximum limit of pitch and major diameter for bolts with a diameter no greater than 1 inch may exceed the Class 2A limit by no greater than 0.021 inch, and by no greater than 0.031 inch for bolts greater than 1 inch in diameter”. |
| 787* | 908.14.C | Change the first paragraph to read "Provide either four or six high strength anchor bolts per the contract plans, meeting the mechanical requirements of ASTM F 1554, for Grade 105, with each standard. Anchor bolts for traffic signal strain poles must meet the requirements of subsection 908.14.B with the following exceptions and additions: |
| 793 | 909.07.D | Change the second sentence of the paragraph to read “Provide a continuous welded joint to create a watertight casing that is capable of withstanding handling and installation stresses. Perform field welding by the SMAW process using E7018 electrodes. |
| 794* | 909.08.A | Change the first sentence to read: Provide bridge deck downspouts of PE pipe meeting the requirements of ASTM F 714, PE 4710, DR 26. |
| 811 | 910.04 | Add the following sentence to the end of this subsection: Fabricate silt fence according to subsection 916.02. |
| 829* | 912.08.K | Replace Table 912-10 with the Table 912-10 below. |
| 837 | 914.04 | Add the following as subsection 914.04.C: C. Lubricant-Adhesive for Neoprene Joint Seals. The lubricant-adhesive must be a single-component moisture-curing polyurethane and aromatic hydrocarbon solvent mixture meeting ASTM D 2835, Type I. Ship in containers plainly marked with the lot or batch number of the material and date of manufacture. Store at temperatures between 58 and 80°F. Do not exceed 12 months shelf-life prior to use. |
| 840 | 914.08 | Change the first sentence of the second paragraph to read “Straight tie bars for end-of-pour joints must consist of bars of the diameter and length shown on the plans meeting the requirements of ASTM A 615, ASTM A 706, or ASTM A 996 (Type R or Type A only)”. |
| 840 | 914.09.A | Change the first sentence of the first paragraph to read “Straight tie bars for longitudinal pavement joints must consist of bars of the diameter and length shown on the plans meeting the requirements of ASTM A 615, ASTM A706, or ASTM A 996 (Type R or Type A only)”. |

| Page | Subsection | Errata |
|------|------------|---|
| 840 | 914.09.B | Change the first sentence of the first paragraph to read "Bent tie bars for bulkhead joints must consist of bars of the diameter and length shown on the plans. |
| 841 | 914.12 | In the first sentence of this subsection change "AASHTO Division II" to read "AASHTO LRFD Bridge Construction Specifications". |
| 841* | 914.13 | In the first sentence of this subsection change "ASTM D 1248, for Type III, Class B" to read "ASTM D 4976, Group 2, Class 4, Grade 4". |
| 844 | 916.01.A | Change the first sentence to read "Cobblestone must consist of rounded or semi-rounded rock fragments with an average dimension from 3 inches to 10 inches." |
| 845 | 916.01.D.1 | Change the second sentence to read "Checkdams for ditch grades 2 percent or greater must be constructed using cobblestone or broken concrete ranging from 3 inches to 10 inches in size." |
| 851* | 917.10.B.1 | Delete the paragraph and replace it with the following: 1. Class A. Provide and apply Class A chemical nutrient fertilizer either according to MSU Soil Testing Lab Recommendations for Phosphorus Applications to Turfgrass, except the maximum single application rate of nutrient will be 48 pounds per acre, when soil tests are required or as indicated in subsections 917.10.B.1.a and 917.10.B.1.b. |
| 851 | 917.10.B.1 | Add the MSU Soil Testing Lab Recommendations for Phosphorus Applications to Turfgrass, found below, after the first paragraph of this subsection. |
| 853 | 917.15.B.1 | Change the second sentence of the subsection to read: The net must meet the requirements of subsection 917.15.D and be capable of reinforcing the blanket to prevent damage during shipping, handling, and installation. |
| 864 | 918.07.C | Change the first sentence of the first paragraph to read: Provide anchor bolts, nuts, and washers meeting the requirements of subsection 908.14.A and subsection 908.14.B. |
| 864 | 918.07.C | Delete the second sentence of the second paragraph. |
| 864 | 918.07.C | Change the third sentence to read: Provide anchor bolts threaded 4 inches beyond the anchor bolt projection shown on the plans. |
| 867 | 918.08.C | Change the last sentence of the first paragraph on this page to read: Galvanize bolts, nuts, washers, and lock washers as specified in subsection 908.14.B. |
| 867 | 918.08.C | Change the last sentence of the subsection to read: |

| Page | Subsection | Errata |
|------|----------------|---|
| | | Provide each frangible base with manufacturer access covers as shown on the plans. |
| 867 | 918.08.D | Change the first sentence of this subsection to read: Provide anchor bolts and associated nuts, studs, and couplings meeting the requirements of subsection 908.14. |
| 903 | 921.03.D | Delete the last three sentences of the first paragraph of this subsection. |
| 916 | 921.07 | Change the first sentence of the first paragraph to read "Provide LED case signs internally illuminated by LEDs and changeable message case signs internally illuminated with LED light sources." |
| 936 | 922.04.B | In the first sentence of the first paragraph change the "R-52" to "R-126". |
| 936 | 922.04.B | Add the following to the end of the first paragraph: Hardware used to connect the end section to the barrier must meet the requirements of NCHRP 350 or MASH (Test Level 3 or higher). |
| 936 | 922.04.B | In the first sentence of the second paragraph delete "R-52". |
| 961 | Pay item Index | Delete the following pay items from the list: Pavt Mrkg, (material), 4 inch, SRSM, (color).....598.....811 Pavt Mrkg, (material), 4 inch, SRSM, 2 nd Application, (color).....598.....811 |
| 961 | Pay Item Index | Change the following pay items in the list to read: Pavt Mrkg, Ovly Cold Plastic, 12 inch, Cross Hatching, (color) Pavt Mrkg, Polyurea, __ inch, Cross Hatching, (color) Add the following pay items to the list: Pavt Mrkg, Polyurea, (legend).....598.....811 Pavt Mrkg, Polyurea, (symbol).....598.....811 Pedestal, Pushbutton, Alum.....696.....820 Pedestal, Pushbutton, Rem.....696.....820 |
| 962 | Pay Item Index | Change the following pay items in the list to read: Pile Driving Equipment, Furn (Structure No.) Pile, Galv (Structure No.) |
| 965 | Pay Item Index | Change the following pay item in the list to read: Steel Casing Pipe, __ inch, Tr Det __ |
| 966 | Pay Item Index | Delete the following pay item form the list; Temp Casing.....533.....718 |
| 967 | Pay Item Index | Delete the following pay item form the list; Truss Fdn Anchor Bolts, Replace.....584.....810 |

An asterisk (*) indicates an entry which has been revised from an earlier version of this Supplemental Specification.

| Page | Subsection | Errata |
|-------------|-------------------|---|
| 967 | Pay Item Index | Change the following pay item in the list to read: Traf Regulator Control |
| 968 | Pay item Index | Change the following pay item in the list to read: Water Shutoff, Adj, Temp, Case __ |
| 969 | Pay item Index | Change the following pay item in the list to read: Witness, Log, Layout, \$1000.00 |

**Table 701-1
Concrete Structure Mixtures**

| Concrete Grade (e,h) | Section Number Reference (i) | Cement Content per cyd (b,c) | | Type A, D or no Admixture | Type MR, F, or G Admixtures (g) | | | Minimum Strength of Concrete (f) | | | | |
|----------------------|---|------------------------------|------|---------------------------|---------------------------------|---------------------------|-------------------------------|----------------------------------|--------|--------------------------------|-------|--------|
| | | lb | sack | | Before Admixture | After Admixture (Type MR) | After Admixture (Type F or G) | Flexural (psi) | | | | |
| | | | | | | | | 7 Day | 14 Day | 28 Day (Class Design Strength) | 7 Day | 14 Day |
| S1 | 706, 711, 712, 705 | 658 (d) | 7.0 | 0 - 3 | 0 - 6 | 0 - 7 | 625 | 700 | 725 | 3,200 | 4,000 | 4,500 |
| | | 611 | 6.5 | 0 - 3 | 3 - 6 | 3 - 7 | 600 | 650 | 700 | 3,000 | 3,500 | 4,000 |
| S2 (a) | 705, 706, 401, 705, 706, 712, 713, 801, 802, 803, 810 | 611 | 6.5 | 0 - 4 | 3 - 7 | 3 - 8 | 550 | 600 | 650 | 2,600 | 3,000 | 3,500 |
| | | 564 | 6.0 | 0 - 3 | 0 - 6 | 0 - 7 | 550 | 600 | 650 | 2,600 | 3,000 | 3,500 |
| S3 | 402, 403, 803, 804, 806 | 526 (d) | 5.6 | 0 - 3 | 0 - 6 | 0 - 7 | 500 | 550 | 600 | 2,200 | 2,600 | 3,000 |
| | | 517 | 5.5 | 0 - 3 | 0 - 6 | 0 - 7 | 500 | 550 | 600 | 2,200 | 2,600 | 3,000 |
| | | 489 (d) | 5.2 | 0 - 3 | 0 - 6 | 0 - 7 | 500 | 550 | 600 | 2,200 | 2,600 | 3,000 |

a. Unless otherwise required, use Coarse Aggregate 6AA or 17A for exposed structural concrete in bridges, retaining walls, and pump stations.
b. Do not place concrete mixtures containing supplemental cementitious materials unless the local average minimum temperature for the next 10 consecutive days is forecast to be above 40 °F. Adjustments to the time required for opening to construction or vehicular traffic may be necessary. Cold weather protection may be required, as described in the quality control plan. The restriction does not apply to Grade S1 concrete in foundation piling below ground level or Grade T concrete in tremie construction.
c. Type III cement is not permitted.
d. Use admixture quantities specified by the Qualified Products Lists to reduce mixing water. Admixture use is required for Grade D, Grade S2, and Grade S3, concrete with a reduced cement content. Use a water-reducing retarding admixture at the required dosage for Grade D concrete to provide the setting retardation required. When the maximum air temperature is not forecast to exceed 60 °F for the day, the Contractor may use a water-reducing admixture or a water-reducing retarding admixture. Ensure Grade D concrete in concrete diaphragms contains a water-reducing admixture, or a water-reducing retarding admixture. For night casting, the Contractor may use a water-reducing admixture in lieu of water-reducing retarding admixture, provided that the concrete can be placed and finished prior to initial set.
e. The mix design basis for bulk volume (dry, loose) of coarse aggregate per unit volume of concrete is 68% for Grade S1, and 70% for Grade D, Grade S2, Grade T, and Grade S3.
f. The Contractor may use flexural strength to determine form removal. Use compressive strength for acceptance in other situations.
g. MR = Mid-range.
h. The Engineer will allow the use of an optimized aggregate gradation as specified in section 604.
i. Section Number Reference:

| | | | | | |
|-----|----------------------------------|-----|------------------------------------|-----|--|
| 401 | Culverts | 711 | Bridge Railings | 803 | Concrete Sidewalk, Sidewalk Ramps, and Steps |
| 402 | Storm Sewers | 712 | Bridge Rehabilitation-Concrete | 804 | Concrete Barriers and Glare Screens |
| 403 | Drainage Structures | 713 | Bridge Rehabilitation-Steel | 806 | Bicycle Paths |
| 705 | Foundation Piling | 801 | Concrete Driveways | 810 | Permanent Traffic Signs and Supports |
| 706 | Structural Concrete Construction | 802 | Concrete Curb, Gutter and Dividers | | |

An asterisk (*) indicates an entry which has been revised from an earlier version of this Supplemental Specification.

**Table 902-6
Superpave Final Aggregate Blend Physical Requirements**

| Est. Traffic (million ESAL) | Mix Type | Percent Crushed Minimum Criteria | | Fine Aggregate Angularity Minimum Criteria | | % Sand Equivalent Minimum Criteria | | Los Angeles Abrasion % Loss Minimum Criteria | | % Soft Particles Maximum Criteria (b) | | % Flat and Elongated Particles Maximum Criteria (c) | |
|-----------------------------------|-------------|-------------------------------------|----------------|--|----------------|---------------------------------------|----------------|--|----------------|---|----------------|--|----------------|
| | | Top & Leveling Courses | Base Course | Top & Leveling Courses | Base Course | Top & Leveling Courses | Base Course | Top & Leveling Courses | Base Course | Top & Leveling Courses | Base Course | Top & Leveling Courses | Base Course |
| < 0.3 | LVSP | 55/— | — | — | — | 40 | 40 | 45 | 45 | 10 | 10 | — | — |
| < 0.3 | E03 | 55/— | — | — | — | 40 | 40 | 45 | 45 | 10 | 10 | — | — |
| ≥0.3 - <1.0 | E1 | 65/— | — | 40 | — | 40 | 40 | 40 | 45 | 10 | 10 | — | — |
| ≥1.0 - < 3 | E3 | 75/— | 50/— | 40(a) | 40(a) | 40 | 40 | 35 | 40 | 5 | 5 | 10 | 10 |
| ≥3 - <10 | E10 | 85/80 | 60/— | 45 | 40 | 45 | 45 | 35 | 40 | 5 | 5 | 10 | 10 |
| ≥10 - <30 | E30 | 95/90 | 80/75 | 45 | 40 | 45 | 45 | 35 | 35 | 3 | 4.5 | 10 | 10 |
| ≥30 - <100 | E50 | 100/10 0 | 95/90 | 45 | 45 | 50 | 50 | 35 | 35 | 3 | 4.5 | 10 | 10 |

(a) For an E3 mixture type that enters the restricted zone as defined in Table 902-5, the minimum is 43. If these criteria are satisfied, acceptance criteria and associated incentive/disincentive or pay adjustment tied to this gradation restricted zone requirement included in contract, do not apply. Otherwise, final gradation blend must be outside of the restricted zone.

(b) Soft particles maximum is the sum of the shale, siltstone, ochre, coal, clay-ironstone and particles that are structurally weak or are non-durable in service.

(c) Maximum by weight with a 1 to 5 aspect ratio.

Note: "85/80" denotes that 85 percent of the coarse aggregate has one fractured face and 80 percent has at least two fractured faces.

| Table 912-10 Minimum Retention Requirements | | | | |
|--|--|-------------------|--|--------------------------|
| Preservative | Minimum Retention, (pcf) | | | AWPA Standard |
| | Guardrail Posts | Sign Posts | Blocks | |
| Pentachlorophenol | 0.60 | 0.50 | 0.40 | A6 |
| CCA, ACZA | 0.60 | 0.50 | 0.40 | A11 |
| ACQ (a) | 0.60 | Not Allowed | 0.40 | A11 |
| CA-B (a) | 0.31 | Not Allowed | 0.21 | A11 |
| CA-A (a) | 0.31 | Not Allowed | 0.15 | A11 |
| Other Waterborne preservatives | AWPA Commodity Specification A, Table 3.0, Use Category 4B | Not Allowed | AWPA Commodity Specification A, Table 3.0, Use Category 4A | A11 |
| a. Non-Metallic washers or spacers are required for timber and lumber treated with ACQ or CA placed in direct contact with aluminum. Do not use with sign posts. | | | | |

MSU Soil Testing Lab Recommendations for Phosphorus Applications to Turfgrass
3/8/2012

| | | Sand based rootzone establishment | Golf greens and tees est. or mature; Kentucky bluegrass or perennial ryegrass athletic fields est. or mature; sand based rootzone mature | Lawns, golf course fairways; establishment or mature | Establishment without soil test |
|--|------------------------------------|---|--|---|---|
| Bray P1, Mehlich 3 Soil Test Value (ppm): pH<7.4 | Olsen Soil Test Value (ppm) pH>7.4 | Recommendation (lbs. P ₂ O ₅ /1000 ft. ²) | Recommendation (lbs. P ₂ O ₅ /1000 ft. ²) | Recommendation (lbs. P ₂ O ₅ /1000 ft. ²) | Recommendation (lbs. P ₂ O ₅ /1000 ft. ²) |
| 0 | 0 | 4.4 | 3.4 | 2.5 | 2.5 lbs. year (Maximum single application of 1.5 lbs.) |
| 2 | 1.3 | 4.1 | 3.1 | 2.2 | |
| 4 | 2.7 | 3.9 | 2.7 | 1.9 | |
| 6 | 4 | 3.6 | 2.4 | 1.6 | |
| 8 | 5.3 | 3.4 | 2.0 | 1.3 | |
| 10 | 6.7 | 3.1 | 1.7 | 1.0 | |
| 12 | 8 | 2.8 | 1.4 | 0.7 | |
| 14 | 9.3 | 2.6 | 1.0 | 0.4 | |
| 16 | 10.7 | 2.3 | 0.7 | 0.1 | |
| 18 | 12 | 2.1 | 0.3 | 0.0 | |
| 20 | 13.3 | 1.8 | 0.0 | | |
| 22 | 14.7 | 1.5 | | | |
| 24 | 16 | 1.3 | | | |
| 26 | 17.3 | 1.0 | | | |
| 28 | 18.7 | 0.8 | | | |
| 30 | 20 | 0.5 | | | |
| 32 | 21.3 | 0.2 | | | |
| 34 | 22.7 | 0.0 | | | |

Web resources: www.turf.msu.edu or www.bephosphorusmart.msu.edu

NOTICE TO BIDDERS – INQUIRY

All inquiries concerning the plans and proposal for this project are to be directed to:

Michael Duell

Name

Rural Staff Engineer

Title

duellm1@michigan.gov

E-mail Address

517-335-2627

Phone

All inquiries must be made by E-mail through the electronic proposal system at MDOT's e-Proposal website – www.michigan.gov/mdot-eprop. Telephone inquiries will not be answered. To be able to process and distribute an addendum, if required, all inquiries shall be made at least seven (7) calendar days before the letting. Inquiries made after this date will be considered by MDOT, but will not require a response.

Inquiries made by E-mail must include the following information:

Proposal Item Number

Contract ID

Name of Inquiring Person

Company Name

Phone # and E-mail address

Detailed question(s) with reference to proposal page and plan sheet number

Other employees of MDOT have been instructed to direct all inquiries to the person mentioned above.

2/11/2009

Job(s): 119342A, 120967A, 122218A

APPENDIX A
PROHIBITION OF DISCRIMINATION IN STATE CONTRACTS

In connection with the performance of work under this contract; the contractor agrees as follows:

1. In accordance with Act. No. 453, Public Acts of 1976, the contractor hereby agrees not to discriminate against an employee or applicant for employment with respect to hire, tenure, terms, conditions, or privileges of employment, or a matter directly or indirectly related to employment, because of race, color, religion, national origin, age, sex, height, weight, or marital status. Further, in accordance with Act No. 220, Public Acts of 1976 as amended by Act No. 478, Public Acts of 1980, the contractor hereby agrees not to discriminate against an employee or applicant for employment tenure, terms, conditions, or privileges of employment, or a matter directly or indirectly related to employment, because of a disability that is unrelated to the individual's ability to perform the duties of a particular job or position. A breach of the above covenants shall be regarded as a material breach of this contract.
2. The contractor hereby agrees that any and all subcontractors to this contract, whereby a portion of the work set forth in this contract is to be performed, shall contain a covenant the same as in herein before set forth in section 1 of this Appendix.
3. The contractor will take affirmative action to insure that applicants for employment and employees are treated without regard to their race, color, religion, national origin, sex, height, weight, marital status or disability that is unrelated to the individual's ability to perform the duties of a particular job or position. Such action shall include, but not be limited to the following; employment, upgrading, demotion or transfer, recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.
4. The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, national origin, age, sex, height, marital status or disability that is unrelated to the individuals ability to perform the duties of a particular job or position.
5. The contractor or his collective bargaining representative will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice advising the said labor union or workers' representative of the contractor's commitments under this appendix.
6. The contractor will comply with relevant published rules, regulations, directives, and orders of the Michigan Civil Rights Commission which may be in effect prior to the taking of bids for any individual state project.
7. The contractor will furnish and file compliance reports within such time and upon such forms as provided by the Michigan Civil Rights Commission, said forms may also elicit information as to the practices, policies, program and employment statistics of each subcontractor as well as the contractor himself, and said contractor will permit access to his books, records, and accounts by the Michigan Civil Rights Commission, and/or its agent, for purposes of investigation to ascertain compliance with this contract and relevant with rules, regulations, and orders of the Michigan Civil Rights Commission.
8. In the event that the Civil Rights Commission finds, after a hearing held pursuant to its rules, that a contractor has not complied with the contractual obligations under this agreement, the Civil Rights Commission may, as a part of its order based upon such findings, certify said findings to the Administrative Board of the State of Michigan, which Administrative Board may order the cancellation of the contract found to have been violated, and/or declare the contractor ineligible for future contracts with the state and its political and civil subdivisions, departments, and officers, and including the governing boards of institutions of higher education, until the contractor complies with all of the persons with whom the contractor is declared ineligible to contract as a contracting party in future contracts. In any case before the Civil Rights Commission in which cancellation of an exiting contract is a possibility, the contracting agency shall be notified of such possible remedy and shall be given the option by the Civil Rights Commission to participate in such proceedings.
9. The contractor will include, or incorporate by reference, the provisions of the forgoing paragraphs (1) through (8) in every subcontract or purchase order unless exempted by rules, regulations or orders of the Michigan Civil Rights Commission, and will provide in every subcontract or purchase order that said provisions will be binding upon each subcontractor or seller.

**The Civil Rights Commission referred to as the Michigan Civil Rights Commission*

TITLE VI ASSURANCE

APPENDIX C

During the performance of this contract, the contractor, for itself, its assignees and successors in interest (hereinafter referred to as the “contractor”) agrees as follows:

1. **Compliance with Regulations:** The contractor shall comply with the Regulations relative to nondiscrimination in Federally-assisted programs of the Department of Transportation, Title 49, code of Federal Regulations, Part 21, as they may be amended from time to time, (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this contract.
2. **Nondiscrimination:** The contractor, with regard to the work performed by it during the contract, shall not discriminate on the grounds of race, color, national origin, sex, age, or disability in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor shall not participate either directly or indirectly in the discrimination prohibited by section 21.5 of the Regulation, including employment practices when the contractor covers a program set forth in Appendix B of the Regulations.
3. **Solicitations for Subcontracts, Including Procurements of Materials and Equipment:** In all solicitations either by competitive bidding or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the contractor of the contractor’s obligations under the contract and the Regulations relative to nondiscrimination on the grounds of race, color, national origin, sex, age, or disability.
4. **Information and Reports:** The contractor shall provide all information and reports required by the Regulations, or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the State Highway department of the Federal Highway Administration to be pertinent to ascertain compliance with such Regulations or directives. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish this information, the contractor shall so certify to the State highway department, or the Federal Highway Administration as appropriate, and shall set forth what efforts it has made to obtain the information.
5. **Sanctions for Noncompliance:** In the event of the contractor’s noncompliance with the nondiscrimination provisions of this contract, the State highway department shall impose such contract sanctions as it or the Federal Highway Administration may determine to be appropriate, including, but not limited to:
 - (a) withholding of payments to the contractor under the contract until the contractor complies, and/or
 - (b) cancellation, termination or suspension of the contract, in whole or in part.
6. **Incorporation of Provisions:** The contractor shall include the provisions of paragraphs (1) through (6) in every subcontract, including procurement of materials and leases of equipment, unless exempt by the Regulations, or directives issued pursuant thereto. The contractor shall take such action with respect to any subcontract or procurement as the State highway department or the Federal Highway Administration may direct as a means of enforcing such provisions including sanctions for non-compliance: Provided, however, that, in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the contractor may request the State highway department to enter into such litigation to protect the interests of the State, and, in addition, the contractor may request the United States to enter into such litigation to protect the interests of the United States

COUNTY MINORITY & FEMALE* PERCENTAGES

| | | |
|------------------------|------------------------|-------------------------|
| 1. Alcona_____5.2% | 29. Gratiot_____5.2% | 57. Missaukee____4.9% |
| 2. Alger_____1.0% | 30. Hillsdale_____5.5% | 58. Monroe_____8.8% |
| 3. Allegan_____4.9% | 31. Houghton_____1.0% | 59. Montcalm____4.9% |
| 4. Alpena_____5.2% | 32. Huron _____5.2% | 60. Montmorency__5.2% |
| 5. Antrim_____4.9% | 33. Ingham_____5.5% | 61. Muskegon_____9.7% |
| 6. Arenac_____5.2% | 34. Ionia_____5.5% | 62. Newaygo_____4.9% |
| 7. Baraga_____1.0% | 35. Iosco_____5.2% | 63. Oakland_____17.7% |
| 8. Barry_____7.2% | 36. Iron_____1.0% | 64. Oceana_____9.7% |
| 9. Bay_____2.2% | 37. Isabella_____5.2% | 65. Ogemaw_____5.2% |
| 10. Benzie_____4.9% | 38. Jackson_____5.1% | 66. Ontonagon____1.2% |
| 11. Berrien_____6.2% | 39. Kalamazoo____5.9% | 67. Osceola_____4.9% |
| 12. Branch_____5.5% | 40. Kalkaska_____4.9% | 68. Oscoda_____5.2% |
| 13. Calhoun_____7.2% | 41. Kent_____5.2% | 69. Otsego_____5.2% |
| 14. Cass_____6.2% | 42. Keweenaw____1.0% | 70. Ottawa_____5.2% |
| 15. Charlevoix___4.9% | 43. Lake_____4.9% | 71. Presque Isle__5.2% |
| 16. Cheboygan___5.2% | 44. Lapeer _____17.7% | 72. Roscommon___5.2% |
| 17. Chippewa___5.2% | 45. Leelanau_____4.9% | 73. Saginaw_____14.3% |
| 18. Clare_____5.2% | 46. Lenawee_____7.3% | 74. Sanilac_____16.7% |
| 19. Clinton_____5.5% | 47. Livingston___17.5% | 75. Schoolcraft___1.0% |
| 20. Crawford____5.2% | 48. Luce_____5.2% | 76. Shiawassee__12.6% |
| 21. Delta_____1.0% | 49. Mackinac____5.2% | 77. St. Clair_____17.7% |
| 22. Dickinson___1.0% | 50. Macomb_____17.7% | 78. St. Joseph____5.2% |
| 23. Eaton_____5.5% | 51. Manistee_____4.9% | 79. Tuscola_____5.2% |
| 24. Emmet_____4.9% | 52. Marquette____1.0% | 80. VanBuren_____5.9% |
| 25. Genesee___12.6% | 53. Mason_____4.9% | 81. Washtenaw___8.5% |
| 26. Gladwin_____5.2% | 54. Mecosta_____4.9% | 82. Wayne _____17.7% |
| 27. Gogebic_____1.2% | 55. Menominee___1.0% | 83. Wexford_____4.9% |
| 28. Gr. Traverse__4.9% | 56. Midland_____5.2% | |

*The construction goal for women in any Michigan county is 6.9%

Minority and female percentages are taken from the Office of Federal Contract Compliance Program Statistics.

**Notice of Requirement for Affirmative Action
To Ensure Equal Employment Opportunity for Construction
(EXECUTIVE ORDER 11246)**

1. The offeror's or bidder's attention is called to the Equal Opportunity clause and the Affirmative Action Compliance Requirements for Construction clause of this solicitation.
2. The goals for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

| Goals for Minority participation for each trade | Goals for Female participation for each trade |
|--|---|
| See County Minority and Female Percentages chart | 6.9% |

These goals are applicable to all Contractor's construction work performed in the covered area. If the Contractor performs construction work in a geographical area located outside of the covered area, the Contractor shall apply the goals established for the geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and non-federally involved construction.

The Contractor's compliance with Executive Order 11246, as amended, and the regulations in 41 CFR 60-4 shall be based on **(1)** its implementation of the Equal Opportunity clause, **(2)** specific affirmative action obligations required by the clause entitled *Affirmative Action Compliance Requirements for Construction*, and **(3)** its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade. The Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project, for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, Executive Order 11246, as amended, and the regulations in 41 CFR 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Deputy Assistant Secretary for Federal Contract Compliance, U.S. Department of Labor, within 10 working days following award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the—
 - Name, address, and telephone number of the subcontractor;
 - Employer's identification number of the subcontractor;
 - Estimated dollar amount of the subcontract;
 - Estimated starting and completion dates of the subcontract; and
 - Geographical area in which the subcontract is to be performed.
4. For this Notice, and in any contract resulting from this solicitation, the covered area is the county or counties listed in the Notice of Advertisement. When multiple counties are listed, the minority participation percentage is determined by the covered area county with the greater percentage.

[48 FR 42478, Sept. 19, 1983, as amended at 55 FR 38518, Sept. 18, 1990; 63 FR 70286, Dec. 18, 1998]

**STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY
CONSTRUCTION CONTRACT SPECIFICATIONS
(EXECUTIVE ORDER 11246)**

1. As used in these specifications:
 - a. **“Covered area” means the geographical area described in the solicitation from which this contract resulted;**
 - b. **“Director” means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority;**
 - c. **“Employer identification number” means the Federal Social Security number used on the Employer’s Quarterly Federal Tax Return, U.S. Treasury Department Form 941.**
 - d. **“Minority” includes:**
 - (i) **Black (all person having origins in any of the Black African racial groups not of Hispanic origin); and**
 - (ii) **Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture of origin, regardless of race); and**
 - (iii) **Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, South East Asia, the Indian Subcontinent, or the Pacific Islands); and**
 - (iv) **American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation and participation or community identification).**
2. **Whenever the Contractor, or any Subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitation from which this contract resulted.**
3. **If the Contractor is participating (pursuant to 41 CFR 60.4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such**

Hometown Plan. Each Contractor or Subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors or Subcontractors toward a goal in an approved Plan does not excuse any covered Contractor's or Subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.

- 4. The Contractor shall implement the specific affirmative action standards provided in paragraph 7a through p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. Covered construction contractors performing construction work in geographical areas where they do not have a Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed. Goals are published periodically in the Federal Register in notice form, and such notices may be obtained from any Office of Federal Contract Compliance Programs office or from Federal procurement contracting officers. The Contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specified.**
- 5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.**
- 6. In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.**
- 7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:**
 - a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.**
 - b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.**
 - c. Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a**

union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefor, along with whatever additional actions the Contractor may have taken.

- d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the contractor's efforts to meet its obligations.
- e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include upgrading programs and apprenticeship and trainee programs relevant to the contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources complied under 7b above.
- f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction is performed.
- g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with onsite supervisory personnel such as Superintendents, General Foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.
- h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and Subcontractors with whom the Contractor does or anticipates doing business.
- I. Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.
- j. Encourage present minority and female employees to recruit other minority persons

and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a Contractor's workforce.

- k. **Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60.3.**
 - l. **Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.**
 - m. **Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.**
 - n. **Ensure that all facilities and company activities are nonsegregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.**
 - o. **Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.**
 - p. **Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.**
8. **Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7a through p). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7a through p of these Specifications provided that the contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female workforce participation, makes a good faith effort to meet its individual goals and timetable, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.**
9. **A single goal for minorities and separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally, the Contractor may be in violation of the Executive Order if a specific minority group of women is underutilized).**
10. **The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.**

11. The Contractor shall not enter into any subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.
12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.
13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.
14. The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g. mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.
15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g. those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

Detroit Area Office

Christopher Edwards, Area Office Director
 U.S. DOL/ESA/OFCCP
 Detroit Area Office
 211 West Fort Street
 Detroit, Michigan 48226
 Phone: 313/226-3728

Michigan Counties:

| | | | | | |
|---------|------------|----------|----------------|-----------|------------|
| Alcona | Benzie | Clare | Grand Traverse | Isabella | Lenawee |
| Allegan | Berrien | Clinton | Gratiot | Kalamazoo | Livingston |
| Alpena | Branch | Crawford | Hillsdale | Kalkaska | Macomb |
| Antrim | Calhoun | Eaton | Huron | Kent | Manistee |
| Arenac | Cass | Emmet | Ingham | Lake | Mason |
| Barry | Charlevoix | Genesee | Ionia | Lapeer | Mecosta |
| Bay | Cheboygan | Gladwin | Iosco | Leelanau | Midland |

Michigan Counties:

| | | | |
|--------------------|---------------------|-------------------|------------------|
| Missaukee | Oceana | Roscommon | Van Buren |
| Monroe | Ogemaw | St. Clair | Washtenaw |
| Montcalm | Osceola | St. Joseph | Wayne |
| Montmorency | Oscoda | Saginaw | Wexford |
| Muskegon | Otsego | Sanilac | |
| Newaygo | Ottawa | Shiawassee | |
| Oakland | Presque Isle | Tuscola | |

Milwaukee Area Office

Mr. Robert Potter
U.S. DOL/ESA/OFCCP
Milwaukee Area Office
Reuss Federal Bldg., Room 1115
310 West Wisconsin
Milwaukee, Wisconsin 53203
Phone: 414/291-3822

Michigan Counties:

| | | | | |
|-----------------|------------------|-----------------|------------------|--------------------|
| Alger | Delta | Houghton | Luce | Menominee |
| Baraga | Dickinson | Iron | Mackinac | Ontonagon |
| Chippewa | Gogebic | Keweenaw | Marquette | Schoolcraft |

SPECIAL PROVISIONS

23 CFR CH.1 P 4.230, SUBPT..a, APP. A

Specific Equal Employment Opportunity Responsibilities

1. General

- a. Equal employment opportunity requirements not to discriminate and to take affirmative action to assure equal employment opportunity as required by Executive Order 11246 and Executive Order 11375 are set forth in Required Contract Provisions (Form PR-1273 or 1316, as appropriate) and these Special Provisions that are imposed pursuant to Section 140 of Title 23, U.S.C. as established by Section 22 of the Federal Highway Act of 1968. The requirements set forth in these Special Provisions shall constitute the specific affirmative action requirements for project activities under this contract and supplement the equal employment opportunity requirements set forth in the Required Contract Provisions.
- b. The contractor will work with the State highway agencies and the Federal Government in carrying out equal employment opportunity obligations and in their review of his/her activities under the contract.
- c. The contractors and all his/her subcontractors holding subcontracts not including material suppliers, of \$10,000 or more, will comply with the following minimum specific requirement activities of equal employment opportunity: (The equal employment opportunity requirements of Executive Order 11246, as set forth in Volume 6, Chapter 4, Section 1, Subsection 1 of the Federal-Aid Highway Program Manual, are applicable to material suppliers as well as Contractors and Subcontractors.) The Contractor will include these requirements in every subcontract of \$10,000 or more with such modification of language as is necessary to make them binding on the Subcontractor.

2. Equal Employment Opportunity Policy

The contractor will accept as operating policy the following statement which is designed to further the provision of equal employment opportunity to all persons without regard to their race, color, religion, sex, or national origin, and to promote the full realization of equal employment opportunity through a positive continuing program:

It is the policy of this Company to assure that applicants are employed and that employees are treated during employment, without regard to their race, religion, sex, color, or national origin. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, preapprenticeship, and/or on-the-job training.

3. Equal Employment Opportunity Officer

The contractor will designate and make known to the State highway agency contracting officers an equal employment opportunity officer (hereinafter referred to as the EEO Officer) who will have the responsibility for and must be capable of effectively administering and promoting an active contractor program of equal employment opportunity and who must be assigned adequate authority and responsibility to do so.

4. Dissemination of Policy

- a. All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's equal employment opportunity policy and contractual responsibilities to provide equal employment opportunity in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:
 - (1) Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's equal employment opportunity policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer or other knowledgeable company official.
 - (2) All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer or other knowledgeable company official covering all major aspects of the contractor's equal employment opportunity obligations within thirty days following their reporting for duty with the contractor.
 - (3) All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer or appropriate company official in the contractor's procedures for locating and hiring minority group employees.
- b. In order to make the contractor's equal employment opportunity policy known to all employees, prospective employees, and potential sources of employees, i.e., schools, employment agencies, labor unions (where appropriate), college placement officers, etc., the contractor will take the following actions:
 - (1) Notice and posters setting forth the contractor's equal employment opportunity policy will be placed in areas readily accessible to employees, applicants for employment, and potential employees.
 - (2) The contractor's equal employment opportunity policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

5. Recruitment

- a. When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be published in newspapers or other publications having a large circulation among minority groups in the area from which the project work force would normally be derived.
- b. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minority group applicants, including but not limited to, State employment agencies, schools, colleges, and minority group organizations. To meet this requirement, the contractor will, through his EEO Officer, identify sources of potential minority group employees, and establish with such identified sources of procedures whereby minority group applicants may be referred to the Contractor for employment consideration.

In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, he is expected to observe the provisions of that agreement to the extent that the system permits the contractor's compliance with equal employment opportunity contract provisions. (The U.S. Department of Labor has held that where implementation of such agreements have the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Executive Order 11246, as amended.)

- c. The contractor will encourage his present employees to refer minority group applicants for employment by posting appropriate notices or bulletins in areas accessible to all such employees. In addition, information and procedures with regard to referring minority group applicants will be discussed with employees.

6. Personnel Actions

Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, or national origin. The following procedures shall be followed:

- a. The contractor will conduct periodic inspections of project sites to ensure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.
- b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.
- c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the Contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.
- d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with his obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all avenues of appeal.

7. Training and Promotion

- a. The contractor will assist in locating, qualifying, and increasing the skill of minority group and women employees, and applicants for employment.
- b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the Contractor shall make full use of training programs i.e., apprenticeship and on-the-job training programs for the geographical area of contract performance. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training. In the event the Training Special Provision is provided under this contract, this subparagraph will be superseded as indicated in Attachment 2.
- c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.
- d. The contractor will periodically review the training and promotion potential of minority group and women employees and will encourage eligible employees to apply for such training and promotion.

8. Unions

If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use his/her best efforts to obtain the cooperation of such unions to increase opportunities for minority groups and women within the unions, and to effect referrals by such unions of minority and female employees. Actions by the contractor either directly or through a contractor's association acting as agent will include the procedures set forth below:

- a. The contractor will use best efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minority group members and women for membership in the unions and increasing the skills of minority group employees and women so that they may qualify for higher paying employment.
- b. The contractor will use their best efforts to incorporate an equal employment opportunity clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, or national origin.
- c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such

information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the State highway department and shall set forth what efforts have been made to obtain such information.

- d. In the event the union is unable to provide the contractor with a reasonable flow of minority and women referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, or national origin, making full efforts to obtain qualified and/or qualifiable minority group persons and women. (The U.S. Department of Labor has held that it shall be no excuse that the union with which the contractor has a collective bargaining agreement providing for exclusive referral failed to refer minority employees.) In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the State highway agency.

9. Subcontracting

- a. The contractor will use his best efforts to solicit bids from and to utilize minority group subcontractors or subcontractors with meaningful minority group and female representation among their employees. Contractors shall obtain lists of minority-owned construction firms from State highway agency personnel.
- b. The contractor will use his best efforts to ensure subcontractor compliance with their equal employment opportunity obligations.

10. Records and Reports

- a. The contractor will keep such records as are necessary to determine compliance with the contractor's equal employment opportunity obligations. The records kept by the contractor will be designed to indicate:
 - (1) the number of minority and non-minority group members and women employed in each work classification on the project;
 - (2) the progress and efforts being made in cooperation with unions to increase employment opportunities for minorities and women (applicable only to contractors who rely in whole or in part on unions as a source of their work force),
 - (3) the progress and efforts being made in locating, hiring, training, qualifying, and upgrading minority and female employees, and the progress and efforts being made in securing the services of minority group subcontractors or subcontractors with meaningful minority and female representation among their employees.
- b. All such records must be retained for a period of three years following completion of the contract work and shall be available at reasonable times and places for inspection by authorized representatives of the State highway agency and the Federal Highway Administration.
- c. The contractor will submit to the State highway agency a monthly report for the first three months after construction begins and every month of July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form PR-1391. If on-the-job training is being required by "Training Special Provision," the contractor will be required to furnish Form FHWA 1409.

General Decision Number: MI140001 02/14/2014 MI1

Superseded General Decision Number: MI20130001

State: Michigan

Construction Types: Highway (Highway, Airport & Bridge xxxxx and Sewer/Incid. to Hwy.)

Counties: Michigan Statewide.

| Modification Number | Publication Date |
|---------------------|------------------|
| 0 | 01/03/2014 |
| 1 | 01/24/2014 |
| 2 | 02/07/2014 |
| 3 | 02/14/2014 |

CARP0004-004 06/01/2012

REMAINDER OF STATE

| | Rates | Fringes |
|------------------------------|----------|---------|
| CARPENTER (Piledriver)..... | \$ 24.94 | 16.87 |

CARP0004-005 06/01/2012

LIVINGSTON (Townships of Brighton, Deerfield, Genoa, Hartland, Oceola & Tyrone), MACOMB, MONROE, OAKLAND, SANILAC, ST. CLAIR AND WAYNE COUNTIES

| | Rates | Fringes |
|-----------------------------|----------|---------|
| CARPENTER (Piledriver)..... | \$ 28.24 | 22.70 |

ELEC0017-005 07/01/2013

STATEWIDE

| | Rates | Fringes |
|---|----------|---------|
| Line Construction | | |
| Groundman/Driver..... | \$ 26.43 | 12.13 |
| Journeyman Signal Tech, Communications Tech, Tower | | |
| Tech & Fiber Optic Splicers. | \$ 35.85 | 14.67 |
| Journeyman Specialist..... | \$ 41.23 | 16.13 |
| Operator A..... | \$ 30.38 | 13.20 |
| Operator B..... | \$ 28.39 | 12.66 |

Classifications

Journeyman Specialist: Refers to a crew of only one person working alone.

Operator A: Shall be proficient in operating all power equipment including: Backhoe, Excavator, Directional Bore and Boom/Digger truck.

Operator B: Shall be proficient in operating any 2 of the above mentioned pieces of

equipment listed under Operator A.

ENGI0324-003 06/01/2013

ALCONA, ALPENA, ARENAC, BAY, CHEBOYGAN, CLARE, CLINTON,
CRAWFORD, GENESEE, GLADWIN, GRATIOT, HURON, INGHAM, IOSCO,
ISABELLA, JACKSON, LAPEER, LENAWEE, LIVINGSTON, MACOMB,
MIDLAND, MONROE, MONTMORENCY, OAKLAND, OGEMAW, OSCODA, OTSEGO,
PRESQUE ISLE, ROSCOMMON, SAGINAW, ST. CLAIR, SANILAC,
SHIAWASSEE, TUSCOLA, WASHTENAW AND WAYNE COUNTIES:

| | Rates | Fringes |
|---|----------|---------|
| OPERATOR: Power Equipment (Steel Erection) | | |
| GROUP 1..... | \$ 43.17 | 20.90 |
| GROUP 2..... | \$ 44.17 | 20.90 |
| GROUP 3..... | \$ 41.67 | 20.90 |
| GROUP 4..... | \$ 42.67 | 20.90 |
| GROUP 5..... | \$ 40.17 | 20.90 |
| GROUP 6..... | \$ 41.17 | 20.90 |
| GROUP 7..... | \$ 39.90 | 20.90 |
| GROUP 8..... | \$ 40.90 | 20.90 |
| GROUP 9..... | \$ 39.45 | 20.90 |
| GROUP 10..... | \$ 40.45 | 20.90 |
| GROUP 11..... | \$ 38.72 | 20.90 |
| GROUP 12..... | \$ 39.72 | 20.90 |
| GROUP 13..... | \$ 38.36 | 20.90 |
| GROUP 14..... | \$ 39.36 | 20.90 |
| GROUP 15..... | \$ 37.72 | 20.90 |
| GROUP 16..... | \$ 36.02 | 20.90 |
| GROUP 17..... | \$ 30.91 | 20.90 |
| GROUP 18..... | \$ 29.50 | 20.90 |

FOOTNOTE:

Paid Holidays: New Year's Day, Memorial Day, Fourth of July,
Labor Day, Thanksgiving Day and Christmas Day.

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Engineer when operating combination of boom and jib
400' or longer

GROUP 2: Engineer when operating combination of boom and jib
400' or longer on a crane that requires an oiler

GROUP 3: Engineer when operating combination of boom and jib
300' or longer

GROUP 4: Engineer when operating combination of boom and jib
300' or longer on a crane that requires an oiler

GROUP 5: Engineer when operating combination of boom and jib
220' or longer

GROUP 6: Engineer when operating combination of boom and jib
220' or longer on a crane that requires an oiler

GROUP 7: Engineer when operating combination of boom and jib
140' or longer

GROUP 8: Engineer when operating combination of boom and jib
140' or longer on a crane that requires an oiler

GROUP 9: Tower crane & derrick operator (where operator's
work station is 50 ft. or more above first sub-level)

GROUP 10: Tower crane & derrick operator (where operator's
work station is 50 ft. or more above first sub-level) on a
crane that requires an oiler

GROUP 11: Engineer when operating combination of boom and jib
120' or longer

GROUP 12: Engineer when operating combination of boom and jib
120' or longer on a crane that requires an oiler

GROUP 13: Crane operator; job mechanic and 3 drum hoist and
excavator

GROUP 14: Crane operator on a crane that requires an oiler

GROUP 15: Hoisting operator; 2 drum hoist and rubber tired
backhoe

GROUP 16: Forklift and 1 drum hoist

GROUP 17: Compressor or welder operator

GROUP 18: Oiler

ENGI0324-004 06/01/2013

AREA 1: ALLEGAN, BARRY, BERRIEN, BRANCH, CALHOUN, CASS, EATON,
HILLSDALE, IONIA, KALAMAZOO, KENT, LAKE, MANISTEE, MASON,
MECOSTA, MONTCALM, MUSKEGON, NEWAYGO, OCEANA, OSCEOLA, OTTAWA,
ST. JOSEPH, VAN BUREN

AREA 2: ANTRIM, BENZIE, CHARLEVOIX, EMMET, GRAND TRAVERSE,
KALKASKA, LEELANAU, MISSAUKEE AND WEXFORD COUNTIES:

| | Rates | Fringes |
|---|----------|---------|
| OPERATOR: Power Equipment (Steel Erection) | | |
| AREA 1 | | |
| GROUP 1..... | \$ 29.44 | 20.90 |
| GROUP 2..... | \$ 29.19 | 20.90 |
| GROUP 3..... | \$ 28.69 | 20.90 |
| GROUP 4..... | \$ 23.59 | 20.90 |
| GROUP 5..... | \$ 21.94 | 20.90 |
| GROUP 6..... | \$ 19.34 | 20.90 |
| AREA 2 | | |
| GROUP 1..... | \$ 29.44 | 20.90 |
| GROUP 2..... | \$ 29.19 | 20.90 |
| GROUP 3..... | \$ 28.19 | 20.90 |
| GROUP 4..... | \$ 23.29 | 20.90 |

| | | |
|--------------|----------|-------|
| GROUP 3..... | \$ 22.88 | 20.25 |
| GROUP 4..... | \$ 22.60 | 20.25 |

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Backfiller tamper; Backhoe; Batch plant operator (concrete); Clamshell; Concrete paver (2 drums or larger); Conveyor loader (Euclid type); Crane (crawler, truck type or pile driving); Dozer; Dragline; Elevating grader; Endloader; Gradall (and similar type machine); Grader; Mechanic; Power shovel; Roller (asphalt); Scraper (self-propelled or tractor drawn); Side boom tractor (type D-4 or equivalent and larger); Slip form paver; Slope paver; Trencher (over 8 ft. digging capacity); Well drilling rig; Concrete pump with boom operator; Hydro Excavator

GROUP 2: Boom truck (power swing type boom); Crusher; Hoist; Pump (1 or more - 6-in. discharge or larger - gas or diesel- powered or powered by generator of 300 amperes or more - inclusive of generator); Side boom tractor (smaller than type D-4 or equivalent); Tractor (pneu-tired, other than backhoe or front end loader); Trencher (8-ft. digging capacity and smaller); Vac Truck

GROUP 3: Air compressors (600 cfm or larger); Air compressors (2 or more-less than 600 cfm); Boom truck (non-swinging, non- powered type boom); Concrete breaker (self-propelled or truck mounted - includes compressor); Concrete paver (1 drum-1/2 yd. or larger); Elevator (other than passenger); Maintenance person; Pump (2 or more-4-in. up to 6-in. discharge-gas or diesel powered - excluding submersible pumps); Pumpcrete machine (and similar equipment); Wagon drill (multiple); Welding machine or generator (2 or more-300 amp. or larger - gas or diesel powered)

GROUP 4: Boiler; Concrete saw (40 hp or over); Curing machine (self-propelled); Farm tractor (with attachment); Finishing machine (concrete); Fire person; Hydraulic pipe pushing machine; Mulching equipment; Oiler; Pumps (2 or more up to 4-in. discharge, if used 3 hours or more a day, gas or diesel powered - excluding submersible pumps); Roller (other than asphalt); Stump remover; Trencher (service); Vibrating compaction equipment, self-propelled (6 ft. wide or over); End dump operator; Sweeper (Wayne type); Water wagon and Extend-a boom forklift

ENGI0324-006 06/01/2013

AREA 1: GENESEE, MACOMB, MONROE, OAKLAND, WASHTENAW AND WAYNE COUNTIES

AREA 2: ALCONA, ALGER, ALLEGAN, ALPENA, ANTRIM, ARENAC, BARAGA, BARRY, BAY, BENZIE, BERRIEN, BRANCH, CALHOUN, CASS, CHARLEVOIX, CHEBOYGAN, CHIPPEWA, CLARE, CLINTON, CRAWFORD, DELTA, DICKINSON, EATON, EMMET, GLADWIN, GOGEBIC, GRAND TRAVERSE, GRATIOT, HILLSDALE, HOUGHTON, HURON, INGHAM, IONIA, IOSCO, IRON, ISABELLA, JACKSON, KALAMAZOO, KALKASKA, KENT, KEWEENAW, LAKE, LAPEER, LEELANAU, LENAWEE, LIVINGSTON, LUCE, MACKINAC, MANISTEE, MARQUETTE, MASON, MECOSTA, MENOMINEE, MIDLAND, MISSAUKEE, MONTCALM, MONTMORENCY, MUSKEGON, NEWAYGO, OCEANA,

OGEMAW, ONTONAGON, OSCEOLA, OSCODA, OTSEGO, OTTAWA, PRESQUE
 ISLE, ROSCOMMON, SAGINAW, ST. CLARE, ST. JOSEPH, SANILAC,
 SCHOOLCRAFT, SHIAWASSEE, TUSCOLA, VAN BUREN AND WEXFORD COUNTIES

| | Rates | Fringes |
|---|----------|---------|
| Power equipment operators: (AIRPORT, BRIDGE & HIGHWAY CONSTRUCTION) | | |
| AREA 1 | | |
| GROUP 1..... | \$ 29.51 | 20.35 |
| GROUP 2..... | \$ 22.78 | 20.35 |
| GROUP 3..... | \$ 24.08 | 20.35 |
| GROUP 4..... | \$ 22.22 | 20.35 |
| GROUP 5..... | \$ 22.05 | 20.35 |
| AREA 2 | | |
| GROUP 1..... | \$ 29.51 | 20.35 |
| GROUP 2..... | \$ 22.63 | 20.35 |
| GROUP 3..... | \$ 23.93 | 20.35 |
| GROUP 4..... | \$ 22.07 | 20.35 |
| GROUP 5..... | \$ 21.75 | 20.35 |

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Asphalt plant operator; Crane operator (does not include work on bridge construction projects when the crane operator is erecting structural components); Dragline operator; Shovel operator; Locomotive operator; Paver operator (5 bags or more); Elevating grader operator; Pile driving operator; Roller operator (asphalt); Blade grader operator; Trenching machine operator (ladder or wheel type); Auto-grader; Slip form paver; Self-propelled or tractor-drawn scraper; Conveyor loader operator (Euclid type); Endloader operator (1 yd. capacity and over); Bulldozer; Hoisting engineer; Tractor operator; Finishing machine operator (asphalt); Mechanic; Pump operator (6-in. discharge or over, gas, diesel powered or generator of 300 amp. or larger); Shouldering or gravel distributing machine operator (self-propelled); Backhoe (with over 3/8 yd. bucket); Side boom tractor (type D-4 or equivalent or larger); Tube finisher (slip form paving); Gradall (and similar type machine); Asphalt paver (self-propelled); Asphalt planer (self-propelled); Batch plant (concrete-central mix); Slurry machine (asphalt); Concrete pump (3 in. and over); Roto-mill; Swinging boom truck (over 12 ton capacity); Hydro demolisher (water blaster); Farm-type tractor with attached pan

GROUP 2: Screening plant operator; Washing plant operator; Crusher operator; Backhoe (with 3/8 yd. bucket or less); Side boom tractor (smaller than D-4 type or equivalent); Sweeper (Wayne type and similar equipment); Vacuum truck operator; Batch plant (concrete dry batch)

GROUP 3: Grease Truck

GROUP 4: Air compressor operator (600 cu. ft. per min or more); Air compressor operator (two or more, less than 600 cfm); Wagon drill operator; Concrete breaker; Tractor operator (farm type with attachment)

GROUP 5: Boiler fire tender; Oiler; Fire tender; Trencher (service); Flexplane operator; Cleftplane operator; Grader operator (self-propelled fine-grade or form (concrete)); Finishing machine operator (concrete); Boom or winch hoist truck operator; Endloader operator (under 1 yd. capacity); Roller operator (other than asphalt); Curing equipment operator (self-propelled); Concrete saw operator (40 h.p. or over); Power bin operator; Plant drier operator (asphalt); Vibratory compaction equipment operator (6 ft. wide or over); Guard post driver operator (power driven); All mulching equipment; Stump remover; Concrete pump (under 3-in.); Mesh installer (self-propelled); Tractor operator (farm type); End dump; Skid steer

 ENGI0324-007 10/20/2013

ALGER, BARAGA, CHIPPEWA, DELTA, DICKINSON, GOGEBIC, HOUGHTON, IRON, KEWEENAW, LUCE, MACKINAC MARQUETTE, MENOMINEE, ONTONAGON AND SCHOOLCRAFT COUNTIES:

| | Rates | Fringes |
|---|----------|---------|
| OPERATOR: Power Equipment (Steel Erection) | | |
| Compressor, welder and forklift..... | \$ 24.18 | 20.90 |
| Crane operator, main boom & jib 120' or longer..... | \$ 27.93 | 20.90 |
| Crane operator, main boom & jib 140' or longer..... | \$ 28.18 | 20.90 |
| Crane operator, main boom & jib 220' or longer..... | \$ 28.43 | 20.90 |
| Mechanic with truck and tools..... | \$ 28.93 | 20.90 |
| Oiler and fireman..... | \$ 22.88 | 20.90 |
| Regular operator..... | \$ 27.43 | 20.90 |

 ENGI0324-008 10/01/2012

ALCONA, ALGER, ALLEGAN, ALPENA, ANTRIM, ARENAC, BARAGA, BARRY, BAY, BENZIE, BERRIEN, BRANCH, CALHOUN, CASS, CHARLEVOIX, CHEBOYGAN, CHIPPEWA, CLARE, CLINTON, CRAWFORD, DELTA, DICKINSON, EATON, EMMET, GENESEE, GLADWIN, GOGEBIC, GRAND TRAVERSE, GRATIOT, HILLSDALE, HOUGHTON, HURON, INGHAM, IONIA, IOSCO, IRON, ISABELLA, JACKSON, KALAMAZOO, KALKASKA, KENT, KEWEENAW, LAKE, LAPEER, LEELANAU, LENAWEE, LIVINGSTON, LUCE, MACKINAC, MACOMB, MANISTEE, MARQUETTE, MASON, MECOSTA, MENOMINEE, MIDLAND, MISSAUKEE, MONTCALM, MONTMORENCY, MONROE, MUSKEGON, NEWAYGO, OAKLAND, OCEANA, OGEMAW, ONTONAGON, OSCEOLA, OSCODA, OTSEGO, OTTAWA, PRESQUE ISLE, ROSCOMMON, SAGINAW, ST. CLARE, ST. JOSEPH, SANILAC, SCHOOLCRAFT, SHIAWASSEE, TUSCOLA, VAN BUREN, WASHTENAW, WAYNE AND WEXFORD COUNTIES

| | Rates | Fringes |
|---|-------|---------|
| OPERATOR: Power Equipment (Sewer Relining) | | |

| | | |
|--------------|----------|-------|
| GROUP 1..... | \$ 29.65 | 12.39 |
| GROUP 2..... | \$ 28.12 | 12.39 |

SEWER RELINING CLASSIFICATIONS

GROUP 1: Operation of audio-visual closed circuit TV system, including remote in-ground cutter and other equipment used in connection with the CCTV system

GROUP 2: Operation of hot water heaters and circulation systems, water jetters and vacuum and mechanical debris removal systems

 ENGI0325-010 05/01/2012

ALGER, BARAGA, CHIPPEWA, DELTA, DICKINSON, GOGEBIC, HOUGHTON, IRON, KEWEENAW, LUCE, MACKINAC, MARQUETTE, MENOMINEE, ONTONAGON AND SCHOOLCRAFT COUNTIES:

| | Rates | Fringes |
|---|----------|---------|
| OPERATOR: Power Equipment (Underground Construction) | | |
| Crane operator, main boom & jib 120' or longer..... | \$ 27.38 | 19.95 |
| Crane operator, main boom & jib 140' or longer..... | \$ 27.63 | 19.95 |
| Crane operator, main boom & jib 220' or longer..... | \$ 27.88 | 19.95 |
| GROUP 1..... | \$ 26.88 | 19.95 |
| GROUP 2..... | \$ 23.63 | 19.95 |
| GROUP 3..... | \$ 23.05 | 19.95 |
| GROUP 4..... | \$ 22.11 | 19.95 |
| Mechanic with truck and tools..... | \$ 28.38 | 19.95 |

FOOTNOTES: Swing boom truck operator over 15 tons: \$.50 per hour additional. Hydraulic crane operator 75 tons and under: \$.75 per hour additional. Hydraulic crane operator over 75 tons: \$1.00 per hour additional. Lattice boom crane operator: \$1.50 per hour additional. Crusher pit, shafts and tunnel workers: \$2.00 per hour additional.

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Regular equipment operator, crane, dozer, front end loader, job mechanic, pumpcrete and squeezeconcrete, concrete pump, excavator, milling and pulverizing machines, scraper (self-propelled and tractor drawn), welder

GROUP 2: Air track drill, boom truck (non-swing), concrete mixer, material hoist and tugger, pump 6" and over, beltcrete, sweeping machine, trencher, winches, well points and freeze systems

GROUP 3: Air compressor, conveyor, concrete saw, farm tractor (without attachments), fork truck, generator, guard post driver, mulching machine, pumps under 6-in., welding machine and grease person

GROUP 4: Oiler, fire tender, heater operator, brock concrete breaker, elevators (other than passenger), end dumps and skid steer

Crane Operator with main boom and jib 300' or longer shall be paid an additional one dollar and fifty cents (\$1.50) per hour above the 220' of boom and jib wage rate.

Crane Operator with main boom and jib 400' or longer shall be paid an additional one dollar and fifty cents (\$1.50) per hour above the 300 foot of boom wage rate (\$3.00)

 ENGI0325-011 10/01/2011

AREA 1: GENESEE, LAPEER, LIVINGSTON, MACOMB, MONROE, OAKLAND, ST. CLAIR, WASHTENAW AND WAYNE COUNTIES

AREA 2: ALCONA, ALGER, ALLEGAN, ALPENA, ANTRIM, ARENAC, BARAGA, BARRY, BAY, BENZIE, BERRIEN, BRANCH, CALHOUN, CASS, CHARLEVOIX, CHEBOYGAN, CHIPPEWA, CLARE, CLINTON, CRAWFORD, DELTA, DICKINSON, EATON, EMMET, GLADWIN, GOGEBIC, GRAND TRAVERSE, GRATIOT, HILLSDALE, HOUGHTON, HURON, INGHAM, IONIA, IOSCO, IRON, ISABELLA, JACKSON, KALAMAZOO, KALKASKA, KENT, KEWEENAW, LAKE, LEELANAU, LENAWEE, LUCE, MACKINAC, MANISTEE, MARQUETTE, MASON, MECOSTA, MENOMINEE, MIDLAND, MISSAUKEE, MONTCALM, MONTMORENCY, MUSKEGON, NEWAYGO, OCEANA, OGEMAW, ONTONAGON, OSCEOLA, OSCODA, OTSEGO, OTTAWA, PRESQUE ISLE, ROSCOMMON, SAGINAW, ST. JOSEPH, SANILAC, SCHOOLCRAFT, SHIAWASSEE, TUSCOLA, VAN BUREN AND WEXFORD COUNTIES

| | Rates | Fringes |
|---|----------|---------|
| Power equipment operators - hazardous waste removal: (AREA 1) | | |
| AREA 1: LEVEL A | | |
| Engineer when operating crane with boom and jib or leads 140' or longer.... | \$ 34.68 | 19.70 |
| Engineer when operating crane with boom and jib or leads 220' or longer.... | \$ 34.98 | 19.70 |
| GROUP 1..... | \$ 32.03 | 19.70 |
| GROUP 2..... | \$ 27.80 | 19.70 |
| Regular crane operator, mechanic, dragline operator, boom truck operator and concrete pump with boom operator, power shovel operator..... | \$ 33.00 | 19.70 |
| AREA 1: LEVEL B AND C | | |
| Engineer when operating crane with boom and jib or leads 140' or longer.... | \$ 33.73 | 19.70 |
| Engineer when operating crane with boom and jib or leads 220' or longer.... | \$ 34.03 | 19.70 |

| | | |
|--|----------|-------|
| GROUP 1..... | \$ 31.08 | 19.70 |
| GROUP 2..... | \$ 26.85 | 19.70 |
| Regular crane operator, mechanic, dragline operator, boom truck operator and concrete pump with boom operator, power shovel operator..... | \$ 32.05 | 19.70 |
| AREA 1: LEVEL D WHEN CAPPING LANDFILL | | |
| Engineer when operating crane with boom and jib or leads 140' or longer.... | \$ 32.18 | 19.70 |
| Engineer when operating crane with boom and jib or leads 220' or longer.... | \$ 32.48 | 19.70 |
| GROUP 1..... | \$ 29.53 | 19.70 |
| GROUP 2..... | \$ 25.30 | 19.70 |
| Regular crane operator, mechanic, dragline operator, boom truck operator and concrete pump with boom operator, power shovel operator..... | \$ 29.88 | 19.70 |
| AREA 1: LEVEL D | | |
| Engineer when operating crane with boom and jib or leads 140' or longer.... | \$ 32.43 | 19.70 |
| Engineer when operating crane with boom and jib or leads 220' or longer.... | \$ 32.73 | 19.70 |
| GROUP 1..... | \$ 29.78 | 19.70 |
| GROUP 2..... | \$ 25.55 | 19.70 |
| Regular crane operator, mechanic, dragline operator, boom truck operator and concrete pump with boom operator, power shovel operator..... | \$ 30.75 | 19.70 |
| Power equipment operators - hazardous waste removal: (AREA 2) | | |
| AREA 2: LEVEL A | | |
| Engineer when operating crane with boom and jib or leads 140' or longer.... | \$ 32.97 | 19.70 |
| Engineer when operating crane with boom and jib or leads 220' or longer.... | \$ 33.27 | 19.70 |
| GROUP 1..... | \$ 30.32 | 19.70 |
| GROUP 2..... | \$ 25.92 | 19.70 |
| Regular crane operator, mechanic, dragline operator, boom truck operator and concrete pump with boom operator, power shovel operator..... | \$ 31.29 | 19.70 |
| AREA 2: LEVEL B AND C | | |
| Engineer when operating crane with boom and jib or leads 140' or longer.... | \$ 31.91 | 19.70 |

| | | |
|--|-------|-------|
| Engineer when operating crane with boom and jib or leads 220' or longer....\$ | 32.23 | 19.70 |
| GROUP 1.....\$ | 29.37 | 19.70 |
| GROUP 2.....\$ | 24.98 | 19.70 |
| Regular crane operator, mechanic, dragline operator, boom truck operator and concrete pump with boom operator, power shovel operator.....\$ | 30.34 | 19.70 |
| AREA 2: LEVEL D WHEN CAPPING LANDFILL | | |
| Engineer when operating crane with boom and jib or leads 140' or longer....\$ | 30.47 | 19.70 |
| Engineer when operating crane with boom and jib or leads 220' or longer....\$ | 30.77 | 19.70 |
| GROUP 1.....\$ | 27.82 | 19.70 |
| GROUP 2.....\$ | 23.43 | 19.70 |
| Regular crane operator, mechanic, dragline operator, boom truck operator and concrete pump with boom operator, power shovel operator.....\$ | 28.79 | 19.70 |
| AREA 2: LEVEL D | | |
| Engineer when operating crane with boom and jib or leads 140' or longer....\$ | 30.72 | 19.70 |
| Engineer when operating crane with boom and jib or leads 220' or longer....\$ | 31.02 | 19.70 |
| GROUP 1.....\$ | 28.07 | 19.70 |
| GROUP 2.....\$ | 23.68 | 19.70 |
| Regular crane operator, mechanic, dragline operator, boom truck operator and concrete pump with boom operator, power shovel operator.....\$ | 29.04 | 19.70 |

HAZARDOUS WASTE REMOVAL CLASSIFICATIONS

Group 1: Backhoe, batch plant operator, clamshell, concrete breaker when attached to hoe, concrete cleaning decontamination machine operator, concrete pump, concrete paver, crusher, dozer, elevating grader, endloader, farm tractor (90 h.p. and higher), gradall, grader, heavy equipment robotics operator, loader, pug mill, pumpcrete machines, pump trucks, roller, scraper (self-propelled or tractor drawn), side boom tractor, slip form paver, slope paver, trencher, ultra high pressure waterjet cutting tool system, vactors, vacuum blasting machine operator, vertical lifting hoist, vibrating compaction equipment (self-propelled), well drilling rig and hydro excavator

GROUP 2: Air compressor, concrete breaker when not attached to hoe, elevator, end dumps, equipment decontamination operator, farm tractor (less than 90 h.p.), forklift, generator, heater, mulcher, pigs (portable reagent storage

tanks), power screens, pumps (water), stationary compressed air plant, sweeper, welding machine and water wagon

 ENGI0325-012 05/01/2013

AREA 1: MACOMB, MONROE, OAKLAND, ST. CLAIR, WASHTENAW AND WAYNE COUNTIES

AREA 2: ALCONA, ALGER, ALLEGAN, ALPENA, ANTRIM, ARENAC, BARAGA, BARRY, BAY, BENZIE, BERRIEN, BRANCH, CALHOUN, CASS, CHARLEVOIX, CHEBOYGAN, CHIPPEWA, CLARE, CLINTON, CRAWFORD, DELTA, DICKINSON, EATON, EMMET, GENESEE, GLADWIN, GOGEBIC, GRAND TRAVERSE, GRATIOT, HILLSDALE, HOUGHTON, HURON, INGHAM, IONIA, IOSCO, IRON, ISABELLA, JACKSON, KALAMAZOO, KALKASKA, KENT, KEWEENAW, LAKE, LAPEER, LEELANAU, LENAWEE, LIVINGSTON LUCE, MACKINAC, MANISTEE, MARQUETTE, MASON, MECOSTA, MENOMINEE, MIDLAND, MISSAUKEE, MONTCALM, MONTMORENCY, MUSKEGON, NEWAYGO, OCEANA, OGEMAW, ONTONAGON, OSCEOLA, OSCODA, OTSEGO, OTTAWA, PRESQUE ISLE, ROSCOMMON, SAGINAW, ST. JOSEPH, SANILAC, SCHOOLCRAFT, SHIAWASSEE, TUSCOLA, VAN BUREN AND WEXFORD COUNTIES

| | Rates | Fringes |
|-----------------------------|----------|---------|
| Power equipment operators - | | |
| gas distribution and duct | | |
| installation work: | | |
| AREA 1 | | |
| GROUP 1..... | \$ 27.08 | 21.15 |
| GROUP 2..... | \$ 26.95 | 21.15 |
| GROUP 3..... | \$ 25.82 | 21.15 |
| GROUP 4..... | \$ 25.25 | 21.15 |
| AREA 2 | | |
| GROUP 1..... | \$ 26.17 | 21.15 |
| GROUP 2-A..... | \$ 26.07 | 21.15 |
| GROUP 2-B..... | \$ 25.85 | 21.15 |
| GROUP 3..... | \$ 25.07 | 21.15 |
| GROUP 4..... | \$ 24.57 | 21.15 |

SCOPE OF WORK: The construction, installation, treating and reconditioning of pipelines transporting gas vapors within cities, towns, subdivisions, suburban areas, or within private property boundaries, up to and including private meter settings of private industrial, governmental or other premises, more commonly referred to as "distribution work," starting from the first metering station, connection, similar or related facility, of the main or cross country pipeline and including duct installation.

AREA 1:

GROUP 1: Backhoe, crane, grader, mechanic, dozer (D-6 equivalent or larger), side boom (D-4 equivalent or larger), trencher(except service), endloader (2 yd. capacity or greater).

GROUP 2: Dozer (less than D-6 equivalent), endloader (under 2 yd. capacity), side boom (under D-4 capacity), backfiller, pumps (1 or 2 of 6-inch discharge or greater), boom truck (with powered boom), tractor (wheel type other than backhoe

or front endloader).

GROUP 3: Tamper (self-propelled), boom truck (with non-powered boom), concrete saw (20 hp or larger), pumps (2 to 4 under 6-inch discharge), compressor (2 or more or when one is used continuously into the second day) and trencher(service).

GROUP 4: Oiler, hydraulic pipe pushing machine, grease person and hydrostatic testing operator.

AREA 2:

GROUP 1: Mechanic, crane (over 1/2 yd. capacity), backhoe (over 1/2 yd. capacity), grader (Caterpillar 12 equivalent or larger)

GROUP 2-A: Trencher(except service), backhoe (1/2 yd. capacity or less)

GROUP 2-B: Crane (1/2 yd. capacity or less), compressor (2 or more), dozer (D-4 equivalent or larger), endloader (1 yd. capacity or larger), pump (1 or 2 six-inch or larger), side boom (D-4 equivalent or larger)

GROUP 3: Backfiller, boom truck (powered), concrete saw (20 hp or larger), dozer (less than D-4 equivalent), endloader (under 1 yd. capacity), farm tractor (with attachments), pump (2 - 4 under six-inch capacity), side boom tractor(less than D-4 equivalent), tamper (self-propelled), trencher service and grader maintenance

GROUP 4: Oiler, grease person and hydrostatic testing operator

IRON0008-007 06/01/2013

ALGER, BARAGA, CHIPPEWA, DELTA, DICKINSON, GOGEBIC, HOUGHTON, IRON, KEWEENAW, LUCE, MACKINAC MARQUETTE, MENOMINEE, ONTONAGON AND SCHOOLCRAFT COUNTIES:

| | Rates | Fringes |
|---|----------|---------|
| Ironworker - pre-engineered metal building erector..... | \$ 23.70 | 6.95 |
| IRONWORKER | | |
| General contracts | | |
| \$10,000,000 or greater..... | \$ 25.75 | 23.17 |
| General contracts less than \$10,000,000..... | \$ 22.53 | 23.17 |

Paid Holidays: New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day & Christmas Day.

IRON0025-002 04/01/2013

ALCONA, ALPENA, ARENAC, BAY, CHEBOYGAN, CLARE, CLINTON, CRAWFORD, GENESEE, GLADWIN, GRATIOT, HURON, INGHAM, IOSCO, ISABELLA, JACKSON, LAPEER, LIVINGSTON, MACOMB, MIDLAND,

MONTMORENCY, OAKLAND, OGEMAW, OSCODA, OTSEGO, PRESQUE ISLE,
 ROSCOMMON, SAGINAW, SANILAC, SHIAWASSEE, ST. CLAIR, TUSCOLA,
 WASHTENAW AND WAYNE COUNTIES:

| | Rates | Fringes |
|---|----------|---------|
| Ironworker - pre-engineered metal building erector | | |
| Alcona, Alpena, Arenac, Cheboygan, Clare, Clinton, Crawford, Gladwin, Gratiot, Huron, Ingham, Iosco, Isabella, Jackson, Lapeer, Livingston (west of Burkhardt Road), Montmorency, Ogemaw, Oscoda, Otsego, Presque Isle, Roscommon, Sanilac, Shiawassee, Tuscola & Washtenaw (west of U.S. 23)... | \$ 22.17 | 20.13 |
| Bay, Genesee, Lapeer, Livingston (east of Burkhardt Road), Macomb, Midland, Oakland, Saginaw, St. Clair, The University of Michigan, Washtenaw (east of U.S. 23) & Wayne... | \$ 23.39 | 21.13 |
| IRONWORKER | | |
| Ornamental and Structural... | \$ 33.29 | 25.34 |
| Reinforcing..... | \$ 28.30 | 24.60 |

 IRON0055-005 07/01/2013

LENAWEE AND MONROE COUNTIES:

| | Rates | Fringes |
|--|----------|---------|
| IRONWORKER | | |
| Pre-engineered metal buildings..... | \$ 23.59 | 19.35 |
| All other work..... | \$ 28.32 | 19.35 |

 IRON0292-003 06/01/2013

BERRIEN AND CASS COUNTIES:

| | Rates | Fringes |
|---|----------|---------|
| IRONWORKER (Including pre-engineered metal building erector)..... | \$ 27.07 | 16.76 |

 IRON0340-001 12/01/2013

ALLEGAN, ANTRIM, BARRY, BENZIE, BRANCH, CALHOUN, CHARLEVOIX,
 EATON, EMMET, GRAND TRAVERSE, HILLSDALE, IONIA, KALAMAZOO,
 KALKASKA, KENT, LAKE, LEELANAU, MANISTEE, MASON, MECOSTA,
 MISSAUKEE, MONTCALM, MUSKEGON, NEWAYGO, OCEANA, OSCEOLA,
 OTTAWA, ST. JOSEPH, VAN BUREN AND WEXFORD COUNTIES:

| | Rates | Fringes |
|---|----------|---------|
| IRONWORKER (Including pre-engineered metal building erector)..... | \$ 20.68 | 24.57 |

LABO0005-006 10/01/2013

| | Rates | Fringes |
|--|----------|---------|
| Laborers - hazardous waste abatement: (ALCONA, ALPENA, ANTRIM, BENZIE, CHARLEVOIX, CHEBOYGAN, CRAWFORD, EMMET, GRAND TRAVERSE, IOSCO, KALKASKA, LEELANAU, MISSAUKEE, MONTMORENCY, OSCODA, OTSEGO, PRESQUE ISLE AND WEXFORD COUNTIES - Zone 10) Levels A, B or C..... | \$ 17.14 | 12.46 |
| Work performed in conjunction with site preparation not requiring the use of personal protective equipment; Also, Level D..... | \$ 16.14 | 12.46 |
| Laborers - hazardous waste abatement: (ALGER, BARAGA, CHIPPEWA, DELTA, DICKINSON, GOGEBIC, HOUGHTON, IRON, KEWEENAW, LUCE, MACKINAC, MARQUETTE, MENOMINEE, ONTONAGON AND SCHOOLCRAFT COUNTIES - Zone 11) Levels A, B or C..... | \$ 20.92 | 12.49 |
| Work performed in conjunction with site preparation not requiring the use of personal protective equipment; Also, Level D..... | \$ 19.92 | 12.49 |
| Laborers - hazardous waste abatement: (ALLEGAN, BARRY, BERRIEN, BRANCH, CALHOUN, CASS, IONIA COUNTY (except the city of Portland); KALAMAZOO, KENT, LAKE, MANISTEE, MASON, MECOSTA, MONTCALM, MUSKEGON, NEWAYGO, OCEANA, OSCEOLA, OTTAWA, ST. JOSEPH AND VAN BUREN COUNTIES - Zone 9) Levels A, B or C..... | \$ 19.31 | 12.46 |
| Work performed in conjunction with site preparation not requiring the use of personal protective equipment; Also, Level D..... | \$ 18.31 | 12.46 |

| | | |
|---|--|-------|
| Laborers - hazardous waste abatement: (ARENAC, BAY, CLARE, GLADWIN, GRATIOT, HURON, ISABELLA, MIDLAND, OGEMAW, ROSCOMMON, SAGINAW AND TUSCOLA COUNTIES - Zone 8) | | |
| Levels A, B or C.....\$ 20.02 | | 12.46 |
| Work performed in conjunction with site preparation not requiring the use of personal protective equipment; | | |
| Also, Level D.....\$ 19.02 | | 12.46 |
| Laborers - hazardous waste abatement: (CLINTON, EATON AND INGHAM COUNTIES; IONIA COUNTY (City of Portland); LIVINGSTON COUNTY (west of Oak Grove Rd., including the City of Howell) - Zone 6) | | |
| Levels A, B or C.....\$ 22.84 | | 12.46 |
| Work performed in conjunction with site preparation not requiring the use of personal protective equipment; | | |
| Also, Level D.....\$ 21.84 | | 12.46 |
| Laborers - hazardous waste abatement: (GENESEE, LAPEER AND SHIAWASSEE COUNTIES - Zone 7) | | |
| Levels A, B or C.....\$ 23.35 | | 12.50 |
| Work performed in conjunction with site preparation not requiring the use of personal protective equipment; | | |
| Also, Level D.....\$ 22.35 | | 12.50 |
| Laborers - hazardous waste abatement: (HILLSDALE, JACKSON AND LENAWEЕ COUNTIES - Zone 4) | | |
| Levels A, B or C.....\$ 22.38 | | 12.46 |
| Work performed in conjunction with site preparation not requiring the use of personal protective equipment; | | |
| Also, Level D.....\$ 21.38 | | 12.46 |
| Laborers - hazardous waste abatement: (LIVINGSTON COUNTY (east of Oak Grove Rd. and south of M-59, excluding the city of Howell); AND WASHTENAW COUNTY - Zone 3) | | |
| Levels A, B or C.....\$ 28.80 | | 13.42 |
| Work performed in conjunction with site preparation not requiring the use of personal protective equipment; | | |

| | |
|---|-------|
| Also, Level D.....\$ 27.80 | 13.42 |
| Laborers - hazardous waste abatement: (MACOMB AND WAYNE COUNTIES - Zone 1) | |
| Levels A, B or C.....\$ 27.94 | 16.55 |
| Work performed in conjunction with site preparation not requiring the use of personal protective equipment; | |
| Also, Level D.....\$ 26.94 | 16.55 |
| Laborers - hazardous waste abatement: (MONROE COUNTY - Zone 4) | |
| Levels A, B or C.....\$ 29.86 | 14.23 |
| Work performed in conjunction with site preparation not requiring the use of personal protective equipment; | |
| Also, Level D.....\$ 28.86 | 14.23 |
| Laborers - hazardous waste abatement: (OAKLAND COUNTY and the Northeast portion of LIVINGSTON COUNTY bordered by Oak Grove Road on the West and M-59 on the South - Zone 2) | |
| Level A, B, C.....\$ 27.94 | 16.55 |
| Work performed in conjunction with site preparation not requiring the use of personal protective equipment; | |
| Also, Level D.....\$ 26.94 | 16.55 |
| Laborers - hazardous waste abatement: (SANILAC AND ST. CLAIR COUNTIES - Zone 5) | |
| Levels A, B or C.....\$ 24.90 | 14.90 |
| Work performed in conjunction with site preparation not requiring the use of personal protective equipment; | |
| Also, Level D.....\$ 23.90 | 14.90 |

LABO0259-001 09/01/2013

AREA 1: MACOMB, OAKLAND AND WAYNE COUNTIES
AREA 2: ALCONA, ALGER, ALLEGAN, ALPENA, ANTRIM, ARENAC, BARAGA,
BARRY, BAY, BENZIE, BERRIEN, BRANCH, CALHOUN, CASS, CHARLEVOIX,
CHEBOYGAN, CHIPPEWA, CLARE, CLINTON, CRAWFORD, DELTA,
DICKINSON, EATON, EMMET, GENESEE, GLADWIN, GOGEBIC, GRAND
TRAVERSE, GRATIOT, HILLSDALE, HOUGHTON, HURON, INGHAM, IONIA,
IOSCO, IRON, ISABELLA, JACKSON, KALAMAZOO, KALKASKA, KENT,
KEWEENAW, LAKE, LAPEER, LEELANAU, LENAWEE, LIVINGSTON, LUCE,
MACKINAC, MANISTEE, MARQUETTE, MASON, MECOSTA, MENOMINEE,
MIDLAND, MISSAUKEE, MONROE, MONTCALM, MONTMORENCY, MUSKEGON,
NEWAYGO, OCEANA, OGEAW, ONTONAGON, OSCEOLA, OSCODA, OTSEGO,
OTTAWA, PRESQUE ISLE, ROSCOMMON, SAGINAW, ST. CLARE, ST.
JOSEPH, SANILAC, SCHOOLCRAFT, SHIAWASSEE, TUSCOLA, VAN BUREN,

WASHTENAW AND WEXFORD COUNTIES

| | Rates | Fringes |
|---------------------------------------|----------|---------|
| Laborers - tunnel, shaft and caisson: | | |
| AREA 1 | | |
| GROUP 1..... | \$ 21.57 | 16.28 |
| GROUP 2..... | \$ 21.68 | 16.28 |
| GROUP 3..... | \$ 21.74 | 16.28 |
| GROUP 4..... | \$ 21.92 | 16.28 |
| GROUP 5..... | \$ 22.17 | 16.28 |
| GROUP 6..... | \$ 22.50 | 16.28 |
| GROUP 7..... | \$ 15.78 | 16.28 |
| AREA 2 | | |
| GROUP 1..... | \$ 22.80 | 12.46 |
| GROUP 2..... | \$ 22.89 | 12.46 |
| GROUP 3..... | \$ 22.99 | 12.46 |
| GROUP 4..... | \$ 23.15 | 12.46 |
| GROUP 5..... | \$ 23.41 | 12.46 |
| GROUP 6..... | \$ 23.72 | 12.46 |
| GROUP 7..... | \$ 15.99 | 12.46 |

SCOPE OF WORK: Tunnel, shaft and caisson work of every type and description and all operations incidental thereto, including, but not limited to, shafts and tunnels for sewers, water, subways, transportation, diversion, sewerage, caverns, shelters, aquifers, reservoirs, missile silos and steel sheeting for underground construction.

TUNNEL LABORER CLASSIFICATIONS

GROUP 1: Tunnel, shaft and caisson laborer, dump, shanty, hog house tender, testing (on gas) and watchman

GROUP 2: Manhole, headwall, catch basin builder, bricklayer tender, mortar machine and material mixer

GROUP 3: Air tool operator (jackhammer, bush hammer and grinder), first bottom, second bottom, cage tender, car pusher, carrier, concrete, concrete form, concrete repair, cement invert laborer, cement finisher, concrete shoveler, conveyor, floor, gasoline and electric tool operator, gunite, grout operator, welder, heading dinky person, inside lock tender, pea gravel operator, pump, outside lock tender, scaffold, top signal person, switch person, track, tugger, utility person, vibrator, winch operator, pipe jacking, wagon drill and air track operator and concrete saw operator (under 40 h.p.)

GROUP 4: Tunnel, shaft and caisson mucker, bracer, liner plate, long haul dinky driver and well point

GROUP 5: Tunnel, shaft and caisson miner, drill runner, key board operator, power knife operator, reinforced steel or mesh (e.g. wire mesh, steel mats, dowel bars, etc.)

GROUP 6: Dynamite and powder

GROUP 7: Restoration laborer, seeding, sodding, planting,

cutting, mulching and top soil grading; and the restoration of property such as replacing mailboxes, wood chips, planter boxes, flagstones, etc.

LABO0334-001 09/01/2013

| | Rates | Fringes |
|---|----------|---------|
| Laborers - open cut: | | |
| ZONE 1 - MACOMB, OAKLAND AND WAYNE COUNTIES: | | |
| GROUP 1..... | \$ 21.42 | 16.28 |
| GROUP 2..... | \$ 21.53 | 16.28 |
| GROUP 3..... | \$ 21.58 | 16.28 |
| GROUP 4..... | \$ 21.66 | 16.28 |
| GROUP 5..... | \$ 21.72 | 16.28 |
| GROUP 6..... | \$ 19.17 | 16.28 |
| GROUP 7..... | \$ 15.79 | 16.28 |
| ZONE 2 - LIVINGSTON COUNTY (east of M-151 (Oak Grove Rd.)); MONROE AND WASHTENAW COUNTIES: | | |
| GROUP 1..... | \$ 22.45 | 12.46 |
| GROUP 2..... | \$ 22.56 | 12.46 |
| GROUP 3..... | \$ 22.68 | 12.46 |
| GROUP 4..... | \$ 22.75 | 12.46 |
| GROUP 5..... | \$ 22.90 | 12.46 |
| GROUP 6..... | \$ 20.20 | 12.46 |
| GROUP 7..... | \$ 16.84 | 12.46 |
| ZONE 3 - CLINTON, EATON, GENESEE, HILLSDALE AND INGHAM COUNTIES; IONIA COUNTY (City of Portland); JACKSON, LAPEER AND LENAWEЕ COUNTIES; LIVINGSTON COUNTY (west of M-151 Oak Grove Rd.); SANILAC, ST. CLAIR AND SHIAWASSEE COUNTIES: | | |
| GROUP 1..... | \$ 20.64 | 12.46 |
| GROUP 2..... | \$ 20.78 | 12.46 |
| GROUP 3..... | \$ 20.90 | 12.46 |
| GROUP 4..... | \$ 20.95 | 12.46 |
| GROUP 5..... | \$ 21.09 | 12.46 |
| GROUP 6..... | \$ 18.39 | 12.46 |
| GROUP 7..... | \$ 15.54 | 12.46 |
| ZONE 4 - ALCONA, ALLEGAN, ALPENA, ANTRIM, ARENAC, BARRY, BAY, BENZIE, BERRIEN, BRANCH, CALHOUN, CASS, CHARLEVOIX, CHEBOYGAN, CLARE, CRAWFORD, EMMET, GLADWIN, GRAND TRAVERSE, GRATIOT AND HURON COUNTIES; IONIA COUNTY (EXCEPT THE CITY OF PORTLAND); IOSCO, ISABELLA, KALAMAZOO, KALKASKA, KENT, | | |

LAKE, LEELANAU, MANISTEE,
 MASON, MECOSTA, MIDLAND,
 MISSAUKEE, MONTCALM,
 MONTMORENCY, MUSKEGON,
 NEWAYGO, OCEANA, OGEMAW,
 OSCEOLA, OSCODA, OTSEGO,
 OTTAWA, PRESQUE ISLE,
 ROSCOMMON, SAGINAW, ST.
 JOSEPH, TUSCOLA, VAN BUREN
 AND WEXFORD COUNTIES:

| | | |
|--------------|----------|-------|
| GROUP 1..... | \$ 19.65 | 12.46 |
| GROUP 2..... | \$ 19.78 | 12.46 |
| GROUP 3..... | \$ 19.89 | 12.46 |
| GROUP 4..... | \$ 19.96 | 12.46 |
| GROUP 5..... | \$ 20.08 | 12.46 |
| GROUP 6..... | \$ 17.30 | 12.46 |
| GROUP 7..... | \$ 15.64 | 12.46 |

ZONE 5 - ALGER, BARAGA,
 CHIPPEWA, DELTA,
 DICKINSON, GOGEBIC,
 HOUGHTON, IRON,
 KEWEENAW, LUCE, MACKINAC,
 MARQUETTE, MENOMINEE,
 ONTONAGON AND SCHOOLCRAFT
 COUNTIES:

| | | |
|--------------|----------|-------|
| GROUP 1..... | \$ 19.86 | 12.46 |
| GROUP 2..... | \$ 20.00 | 12.46 |
| GROUP 3..... | \$ 20.13 | 12.46 |
| GROUP 4..... | \$ 20.18 | 12.46 |
| GROUP 5..... | \$ 20.23 | 12.46 |
| GROUP 6..... | \$ 17.61 | 12.46 |
| GROUP 7..... | \$ 15.72 | 12.46 |

SCOPE OF WORK:

Open cut construction work shall be construed to mean work which requires the excavation of earth including industrial, commercial and residential building site excavation and preparation, land balancing, demolition and removal of concrete and underground appurtenances, grading, paving, sewers, utilities and improvements; retention, oxidation, flocculation and irrigation facilities, and also including but not limited to underground piping, conduits, steel sheeting for underground construction, and all work incidental thereto, and general excavation. For all areas except the Upper Peninsula, open cut construction work shall also be construed to mean waterfront work, piers, docks, seawalls, breakwalls, marinas and all incidental work. Open cut construction work shall not include any structural modifications, alterations, additions and repairs to buildings, or highway work, including roads, streets, bridge construction and parking lots or steel erection work and excavation for the building itself and back filling inside of and within 5 ft. of the building and foundations, footings and piers for the building. Open cut construction work shall not include any work covered under Tunnel, Shaft and Caisson work.

OPEN CUT LABORER CLASSIFICATIONS

GROUP 1: Construction laborer

GROUP 2: Mortar and material mixer, concrete form person, signal person, well point person, manhole, headwall and catch basin builder, headwall, seawall, breakwall and dock builder

GROUP 3: Air, gasoline and electric tool operator, vibrator operator, driller, pump person, tar kettle operator, bracer, rodder, reinforced steel or mesh person (e.g., wire mesh, steel mats, dowel bars, etc.), welder, pipe jacking and boring person, wagon drill and air track operator and concrete saw operator (under 40 h.p.), windlass and tugger person and directional boring person

GROUP 4: Trench or excavating grade person

GROUP 5: Pipe layer (including crock, metal pipe, multi-plate or other conduits)

GROUP 6: Grouting man, audio-visual television operations and all other operations in connection with closed circuit television inspection, pipe cleaning and pipe relining work and the installation and repair of water service pipe and appurtenances

GROUP 7: Restoration laborer, seeding, sodding, planting, cutting, mulching and top soil grading; and the restoration of property such as replacing mailboxes, wood chips, planter boxes, flagstones, etc.

LABO0465-001 06/01/2013

LABORER: Highway, Bridge and Airport Construction

AREA 1: GENESEE, MACOMB, MONROE, OAKLAND, WASHTENAW AND WAYNE COUNTIES

AREA 2: ALLEGAN, BARRY, BAY, BERRIEN, BRANCH, CALHOUN, CASS, CLINTON, EATON, GRATIOT, HILLSDALE, HURON, INGHAM, JACKSON, KALAMAZOO, LAPEER, LENAWEE, LIVINGSTON, MIDLAND, MUSKEGON, SAGINAW, SANILAC, SHIAWASSEE, ST. CLAIR, ST. JOSEPH, TUSCOLA AND VAN BUREN COUNTIES

AREA 3: ALCONA, ALPENA, ANTRIM, ARENAC, BENZIE, CHARLEVOIX, CHEBOYGAN, CLARE, CRAWFORD, EMMET, GLADWIN, GRAND TRAVERSE, IONIA, IOSCO, ISABELLA, KALKASKA, KENT, LAKE, LEELANAU, MANISTEE, MASON, MECOSTA, MISSAUKEE, MONTCALM, MONTMORENCY, NEWAYGO, OCEANA, OGEMAW, OSCEOLA, OSCODA, OTSEGO, OTTAWA, PRESQUE ISLE, ROSCOMMON AND WEXFORD COUNTIES

AREA 4: ALGER, BARAGA, CHIPPEWA, DELTA, DICKINSON, GOGEBIC, HOUGHTON, IRON, KEWEENAW, LUCE, MACKINAC, MARQUETTE, MENOMINEE, ONTONAGON AND SCHOOLCRAFT COUNTIES

| | Rates | Fringes |
|------------------|----------|---------|
| LABORER (AREA 1) | | |
| GROUP 1..... | \$ 24.60 | 12.46 |
| GROUP 2..... | \$ 24.73 | 12.46 |

| | | |
|------------------|----------|-------|
| GROUP 3..... | \$ 24.91 | 12.46 |
| GROUP 4..... | \$ 24.99 | 12.46 |
| GROUP 5..... | \$ 25.20 | 12.46 |
| GROUP 6..... | \$ 25.50 | 12.46 |
| LABORER (AREA 2) | | |
| GROUP 1..... | \$ 22.60 | 12.46 |
| GROUP 2..... | \$ 22.80 | 12.46 |
| GROUP 3..... | \$ 23.04 | 12.46 |
| GROUP 4..... | \$ 23.39 | 12.46 |
| GROUP 5..... | \$ 23.26 | 12.46 |
| GROUP 6..... | \$ 23.60 | 12.46 |
| LABORER (AREA 3) | | |
| GROUP 1..... | \$ 21.85 | 12.46 |
| GROUP 2..... | \$ 22.06 | 12.46 |
| GROUP 3..... | \$ 22.35 | 12.46 |
| GROUP 4..... | \$ 22.79 | 12.46 |
| GROUP 5..... | \$ 22.41 | 12.46 |
| GROUP 6..... | \$ 22.84 | 12.46 |
| LABORER (AREA 4) | | |
| GROUP 1..... | \$ 21.85 | 12.46 |
| GROUP 2..... | \$ 22.06 | 12.46 |
| GROUP 3..... | \$ 22.35 | 12.46 |
| GROUP 4..... | \$ 22.79 | 12.46 |
| GROUP 5..... | \$ 22.41 | 12.46 |
| GROUP 6..... | \$ 22.84 | 12.46 |

LABORER CLASSIFICATIONS

GROUP 1: Asphalt shoveler or loader; asphalt plant misc.; burlap person; yard person; dumper (wagon, truck, etc.); joint filling laborer; miscellaneous laborer; unskilled laborer; sprinkler laborer; form setting laborer; form stripper; pavement reinforcing; handling and placing (e.g., wire mesh, steel mats, dowel bars); mason's tender or bricklayer's tender on manholes; manhole builder; headwalls, etc.; waterproofing, (other than buildings) seal coating and slurry mix, shoring, underpinning; pressure grouting; bridge pin and hanger removal; material recycling laborer; horizontal paver laborer (brick, concrete, clay, stone and asphalt); ground stabilization and modification laborer; grouting; waterblasting; top person; railroad track and trestle laborer; carpenters' tender; guard rail builders' tender; earth retention barrier and wall and M.S.E. wall installer's tender; highway and median installer's tender (including sound, retaining, and crash barriers); fence erector's tender; asphalt raker tender; sign installer; remote control operated equipment.

GROUP 2: Mixer operator (less than 5 sacks); air or electric tool operator (jackhammer, etc.); spreader; boxperson (asphalt, stone, gravel); concrete paddler; power chain saw operator; paving batch truck dumper; tunnel mucker (highway work only); concrete saw (under 40 h.p.) and dry pack machine; roto-mill grounds person.

GROUP 3: Tunnel miner (highway work only); finishers tenders; guard rail builders; highway and median barrier installer; earth retention barrier and wall and M.S.E. wall installer's (including sound, retaining and crash barriers); fence erector; bottom person; powder person; wagon drill and air track operator; diamond and core

drills; grade checker; certified welders; curb and side rail setter's tender.

GROUP 4: Asphalt raker

GROUP 5: Pipe layers, oxy-gun

GROUP 6: Line-form setter for curb or pavement; asphalt screed checker/screw man on asphalt paving machines.

LABO1076-005 04/01/2013

MICHIGAN STATEWIDE

| | Rates | Fringes |
|-----------------------------|----------|---------|
| LABORER (DISTRIBUTION WORK) | | |
| Zone 1..... | \$ 18.65 | 12.46 |
| Zone 2..... | \$ 17.17 | 12.46 |
| Zone 3..... | \$ 15.40 | 12.46 |
| Zone 4..... | \$ 14.77 | 12.46 |
| Zone 5..... | \$ 14.77 | 12.46 |

DISTRIBUTION WORK - The construction, installation, treating and reconditioning of distribution pipelines transporting coal, oil, gas or other similar materials, vapors or liquids, including pipelines within private property boundaries, up to and including the meter settings on residential, commercial, industrial, institutional, private and public structures. All work covering pumping stations and tank farms not covered by the Building Trades Agreement. Other distribution lines with the exception of sewer, water and cable television are included.

Underground Duct Layer Pay: \$.40 per hour above the base pay rate.

- Zone 1 - Macomb, Oakland and Wayne
- Zone 2 - Monroe and Washtenaw
- Zone 3 - Bay, Genesee, Lapeer, Midland, Saginaw, Sanilac, Shiawassee and St. Clair
- Zone 4 - Alger, Baraga, Chippewa, Delta, Dickinson, Gogebic, Houghton, Iron, Keweenaw, Luce, Mackinac, Marquette, Menominee, Ontonagon and Schoolcraft
- Zone 5 - Remaining Counties in Michigan

PAIN0022-002 07/01/2008

HILLSDALE, JACKSON AND LENAWEE COUNTIES; LIVINGSTON COUNTY (east of the eastern city limits of Howell, not including the city of Howell, north to the Genesee County line and south to the Washtenaw County line); MACOMB, MONROE, OAKLAND, WASHTENAW AND WAYNE COUNTIES:

| | Rates | Fringes |
|--------------|----------|---------|
| PAINTER..... | \$ 25.06 | 14.75 |

FOOTNOTES: For all spray work and journeyman rigging for spray work, also blowing off, \$0.80 per hour additional (applies only to workers doing rigging for spray work on off the floor work. Does not include setting up or moving rigging on floor surfaces, nor does it apply to workers engaged in covering up or tending spray equipment. For all sandblasting and spray work performed on highway bridges, overpasses, tanks or steel, \$0.80 per hour additional. For all brushing, cleaning and other preparatory work (other than spraying or steeplejack work) at scaffold heights of fifty (50) feet from the ground or higher, \$0.50 per hour additional. For all preparatorial work and painting performed on open steel under forty (40) feet when no scaffolding is involved, \$0.50 per hour additional. For all swing stage work-window jacks and window belts-exterior and interior, \$0.50 per hour additional. For all spray work and sandblaster work to a scaffold height of forty (40) feet above the floor level, \$0.80 per hour additional. For all preparatorial work and painting on all highway bridges or overpasses up to forty (40) feet in height, \$0.50 per hour additional. For all steeplejack work performed where the elevation is forty (40) feet or more, \$1.25 per hour additional.

 PAIN0312-001 06/12/2013

EXCLUDES: ALLEGAN COUNTY (Townships of Dorr, Fillmore, Heath, Hopkins, Laketown, Leighton, Manlius, Monterey, Overisel, Salem, Saugatuck and Wayland); INCLUDES: Barry, Berrien, Branch, Calhoun, Cass, Hillsdale, Kalamazoo, St. Joseph, Van Buren

| | Rates | Fringes |
|------------------------|----------|---------|
| PAINTER | | |
| Brush and roller..... | \$ 21.75 | 11.94 |
| Spray, Sandblast, Sign | | |
| Painting..... | \$ 22.75 | 11.94 |

 PAIN0845-003 05/09/2013

CLINTON COUNTY; EATON COUNTY (does not include the townships of Bellevue and Olivet); INGHAM COUNTY; IONIA COUNTY (east of Hwy. M 66); LIVINGSTON COUNTY (west of the eastern city limits of Howell, including the city of Howell, north to the Genesee County line and south to the Washtenaw County line); AND SHIAWASSEE COUNTY (Townships of Bennington, Laingsbury and Perry):

| | Rates | Fringes |
|--------------|----------|---------|
| PAINTER..... | \$ 21.74 | 11.50 |

 PAIN0845-015 05/09/2013

MUSKEGON COUNTY; NEWAYGO COUNTY (except the Townships of Barton, Big Prairie, Brooks, Croton, Ensley, Everett, Goodwell, Grant, Home, Monroe, Norwich and Wilcox); OCEANA COUNTY; OTTAWA

COUNTY (except the townships of Allendale, Blendone, Chester, Georgetown, Holland, Jamestown, Olive, Park, Polkton, Port Sheldon, Tallmadge, Wright and Zeeland):

| | Rates | Fringes |
|-------------------------|----------|---------|
| PAINTER..... | \$ 21.74 | 11.50 |
| ----- | | |
| PAIN0845-018 05/09/2013 | | |

ALLEGAN COUNTY (Townships of Dorr, Fillmore, Heath, Hopkins, Laketown, Leighton, Manlius, Monterey, Overisel, Salem, Saugatuck and Wayland); IONIA COUNTY (west of Hwy. M-66); KENT, MECOSTA AND MONTCALM COUNTIES; NEWAYGO COUNTY (Townships of Barton, Big Prairie, Brooks, Croton, Ensley, Everett, Goodwell, Grant, Home, Monroe, Norwich and Wilcox); OSCEOLA COUNTY (south of Hwy. #10); OTTAWA COUNTY (Townships of Allendale, Blendone, Chester, Georgetown, Holland, Jamestown, Olive, Park, Polkton, Port Sheldon, Tallmadge, Wright and Zeeland):

| | Rates | Fringes |
|-------------------------|----------|---------|
| PAINTER..... | \$ 21.74 | 11.50 |
| ----- | | |
| PAIN1011-003 06/05/2013 | | |

ALGER, BARAGA, CHIPPEWA, DELTA, DICKINSON, GOGEBIC, HOUGHTON, IRON, KEWEENAW, LUCE, MACKINAC, MARQUETTE, MENOMINEE, ONTONAGON AND SCHOOLCRAFT COUNTIES:

| | Rates | Fringes |
|--|----------|---------|
| PAINTER..... | \$ 24.00 | 10.06 |
| ----- | | |
| FOOTNOTES: High pay (bridges, overpasses, watertower): 30 to 80 ft.: \$.65 per hour additional. 80 ft. and over: \$1.30 per hour additional. | | |
| ----- | | |
| PAIN1474-002 06/01/2010 | | |

HURON COUNTY; LAPEER COUNTY (east of Hwy. M-53); ST. CLAIR, SANILAC AND TUSCOLA COUNTIES:

| | Rates | Fringes |
|--|----------|---------|
| PAINTER..... | \$ 23.79 | 12.02 |
| ----- | | |
| FOOTNOTES: Lead abatement work: \$1.00 per hour additional. Work with any hazardous material: \$1.00 per hour additional. Sandblasting, steam cleaning and acid cleaning: \$1.00 per hour additional. Ladder work at or above 40 ft., scaffold work at or above 40 ft., swing stage, boatswain chair, window jacks and all work performed over a falling height of 40 ft.: \$1.00 per hour additional. Spray gun | | |

work, pick pullers and those handling needles, blowing off by air pressure, and any person rigging (setting up and moving off the ground): \$1.00 per hour additional. Steeplejack, tanks, gas holders, stacks, flag poles, radio towers and beacons, power line towers, bridges, etc.: \$1.00 per hour additional, paid from the ground up.

 PAIN1803-003 07/23/2012

ALCONA, ALPENA, ANTRIM, ARENAC, BAY, BENZIE, CHARLEVOIX, CHEBOYGAN, CLARE, CRAWFORD, EMMET, GLADWIN, GRAND TRAVERSE, GRATIOT, IOSCO, ISABELLA, KALKASKA, LAKE, LEELANAU, MANISTEE, MASON, MIDLAND, MISSAUKEE, MONTMORENCY AND OGEMAW COUNTIES; OSCEOLA COUNTY (north of Hwy. #10); OSCODA, OTSEGO, PRESQUE ISLE, ROSCOMMON, SAGINAW AND WEXFORD COUNTIES:

| | Rates | Fringes |
|--|----------|---------|
| PAINTER | | |
| Work performed on water, bridges over water or moving traffic, radio and powerline towers, elevated tanks, steeples, smoke stacks over 40 ft. of falling heights, recovery of lead-based paints and any work associated with industrial plants, except maintenance of industrial plants..... | \$ 22.85 | 12.30 |
| All other work, including maintenance of industrial plant..... | \$ 21.78 | 10.75 |

FOOTNOTES: Spray painting, sandblasting, blowdown associated with spraying and blasting, water blasting and work involving a swing stage, boatswain chair or spider: \$1.00 per hour additional. All work performed inside tanks, vessels, tank trailers, railroad cars, sewers, smoke stacks, boilers or other spaces having limited egress not including buildings, opentop tanks, pits, etc.: \$1.25 per hour additional.

 PLAS0514-001 06/01/2012

ZONE 1: GENESEE, LIVINGSTON, MACOMB, MONROE, OAKLAND, SAGINAW, WASHTENAW AND WAYNE COUNTIES

ZONE 2: ALCONA, ALGER, ALLEGAN, ALPENA, ANTRIM, ARENAC, BARAGA, BARRY, BAY, BENZIE, BERRIEN, BRANCH, CALHOUN, CASS, CHARLEVOIX, CHEBOYGAN, CHIPPEWA, CLARE, CLINTON, CRAWFORD, DELTA, DICKINSON, EATON, EMMET, GLADWIN, GOGEBIC, GRAND TRAVERSE, GRATIOT, HILLSDALE, HOUGHTON, HURON, INGHAM, IONIA, IOSCO, IRON, ISABELLA, JACKSON, KALAMAZOO, KALKASKA, KENT, KEWEENAW, LAKE, LAPEER, LEELANAU, LENAWEE, LUCE, MACKINAC, MANISTEE, MARQUETTE, MASON, MECOSTA, MENOMINEE, MIDLAND, MISSAUKEE,

MONTCALM, MONTMORENCY, MUSKEGON, NEWAYGO, OCEANA, OGEMAW,
 ONTONAGON, OSCEOLA, OSCODA, OTSEGO, OTTAWA, PRESQUE ISLE,
 ROSCOMMON, SANILAC, SCHOOLCRAFT, SHIAWASSEE, ST. CLAIR, ST.
 JOSEPH, TUSCOLA, VAN BUREN AND WEXFORD COUNTIES

| | Rates | Fringes |
|--------------------------------|----------|---------|
| CEMENT MASON/CONCRETE FINISHER | | |
| ZONE 1..... | \$ 29.03 | 12.05 |
| ZONE 2..... | \$ 27.53 | 12.05 |

 PLUM0190-003 05/01/2010

ALCONA, ALGER, ALLEGAN, ALPENA, ANTRIM, ARENAC, BARAGA, BARRY,
 BAY, BENZIE, BERRIEN, BRANCH, CALHOUN, CASS, CHARLEVOIX,
 CHEBOYGAN, CHIPPEWA, CLARE, CLINTON, CRAWFORD, DELTA,
 DICKINSON, EATON, EMMET, GENESEE, GLADWIN, GOGEBIC, GRAND
 TRAVERSE, GRATIOT, HILLSDALE, HOUGHTON, HURON, INGHAM, IONIA,
 IOSCO, IRON, ISABELLA, JACKSON, KALAMAZOO, KALKASKA, KENT,
 KEWEENAW, LAKE, LAPEER, LEELANAU, LENAWEE, LIVINGSTON, LUCE,
 MACKINAC, MACOMB, MANISTEE, MARQUETTE, MASON, MECOSTA,
 MENOMINEE, MIDLAND, MISSAUKEE, MONTCALM, MONTMORENCY, MONROE,
 MUSKEGON, NEWAYGO, OAKLAND, OCEANA, OGEMAW, ONTONAGON, OSCEOLA,
 OSCODA, OTSEGO, OTTAWA, PRESQUE ISLE, ROSCOMMON, SAGINAW, ST.
 CLARE, ST. JOSEPH, SANILAC, SCHOOLCRAFT, SHIAWASSEE, TUSCOLA,
 VAN BUREN, WASHTENAW, WAYNE AND WEXFORD COUNTIES

| | Rates | Fringes |
|---|----------|---------|
| Plumber/Pipefitter - gas distribution pipeline: | | |
| Welding in conjunction with gas distribution pipeline work..... | \$ 30.38 | 19.89 |
| All other work:..... | \$ 20.72 | 11.15 |

 TEAM0007-004 06/01/2013

AREA 1: ALCONA, ALGER, ALLEGAN, ALPENA, ANTRIM, ARENAC, BARAGA,
 BARRY, BAY, BENZIE, BERRIEN, BRANCH, CALHOUN, CASS, CHARLEVOIX,
 CHEBOYGAN, CHIPPEWA, CLARE, CLINTON, CRAWFORD, DELTA,
 DICKINSON, EATON, EMMET, GLADWIN, GOGEBIC, GRAND TRAVERSE,
 GRATIOT, HILLSDALE, HOUGHTON, HURON, INGHAM, IONIA, IOSCO,
 IRON, ISABELLA, JACKSON, KALAMAZOO, KALKASKA, KENT, KEWEENAW,
 LAKE, LAPEER, LEELANAU, LENAWEE, LUCE, MACKINAC, MANISTEE,
 MARQUETTE, MASON, MECOSTA, MENOMINEE, MIDLAND, MISSAUKEE,
 MONTCALM, MONTMORENCY, MUSKEGON, NEWAYGO, OCEANA, OGEMAW,
 ONTONAGON, OSCEOLA, OSCODA, OTSEGO, OTTAWA, PRESQUE ISLE,
 ROSCOMMON, SAGINAW, SANILAC, SCHOOLCRAFT, SHIAWASSEE, ST.
 CLAIR, ST. JOSEPH, TUSCOLA, VAN BUREN AND WEXFORD COUNTIES

AREA 2: GENESEE, LIVINGSTON, MACOMB, MONROE, OAKLAND, WASHTENAW
 AND WAYNE COUNTIES

| | Rates | Fringes |
|--------------|-------|---------|
| TRUCK DRIVER | | |
| AREA 1 | | |

| | | |
|--|-----------|-----------|
| Euclids, double bottoms and lowboys..... | \$ 25.05 | .50 + a+b |
| Trucks under 8 cu. yds..... | \$ 24.80 | .50 + a+b |
| Trucks, 8 cu. yds. and over..... | \$ 24.90 | .50 + a+b |
| AREA 2 | | |
| Euclids, double bottomms and lowboys..... | \$ 24.895 | .50 + a+b |
| Euclids, double bottoms and lowboys..... | \$ 25.15 | .50 + a+b |
| Trucks under 8 cu. yds..... | \$ 24.90 | .50 + a+b |
| Trucks, 8 cu. yds. and over..... | \$ 25.00 | .50 + a+b |

Footnote:

- a. \$367.65 per week
- b. \$52.90 daily

TEAM0247-004 06/01/2004

AREA 1: ALCONA, ALGER, ALLEGAN, ALPENA, ANTRIM, ARENAC, BARAGA, BARRY, BAY, BENZIE, BERRIEN, BRANCH, CALHOUN, CASS, CHARLEVOIX, CHEBOYGAN, CHIPPEWA, CLARE, CLINTON, CRAWFORD, DELTA, DICKINSON, EATON, EMMET, GLADWIN, GOGEBIC, GRAND TRAVERSE, GRATIOT, HILLSDALE, HOUGHTON, HURON, INGHAM, IONIA, IOSCO, IRON, ISABELLA, JACKSON, KALAMAZOO, KALKASKA, KENT, KEWEENAW, LAKE, LAPEER, LEELANAU, LENAWEE, LUCE, MACKINAC, MANISTEE, MARQUETTE, MASON, MECOSTA, MENOMINEE, MIDLAND, MISSAUKEE, MONTCALM, MONTMORENCY, MUSKEGON, NEWAYGO, OCEANA, OGEMAW, ONTONAGON, OSCEOLA, OSCODA, OTSEGO, OTTAWA, PRESQUE ISLE, ROSCOMMON, SANILAC, SCHOOLCRAFT, SHIAWASSEE, ST. CLAIR, ST. JOSEPH, TUSCOLA, VAN BUREN AND WEXFORD COUNTIES

AREA 2: GENESEE, MACOMB, MONROE, OAKLAND, WASHTENAW AND WAYNE COUNTIES

| | Rates | Fringes |
|----------------|----------|---------|
| Sign Installer | | |
| AREA 1 | | |
| GROUP 1..... | \$ 20.18 | .15 + a |
| GROUP 2..... | \$ 19.93 | .15 + a |
| AREA 2 | | |
| GROUP 1..... | \$ 21.73 | .15 + a |
| GROUP 2..... | \$ 21.48 | .15 + a |

FOOTNOTE:

- a. \$132.70 per week, plus \$17.80 per day.

SIGN INSTALLER CLASSIFICATIONS:

GROUP 1: performs all necessary labor and uses all tools required to construct and set concrete forms required in the installation of highway and street signs

GROUP 2: performs all miscellaneous labor, uses all hand and power tools, and operates all other equipment, mobile or otherwise, required for the installation of highway and

street signs

TEAM0247-010 04/01/2013

AREA 1: LAPEER AND SHIAWASSEE COUNTIES

AREA 2: GENESEE, MACOMB, MONROE, OAKLAND, ST. CLAIR, WASHTENAW AND WAYNE COUNTIES

| | Rates | Fringes |
|---|-----------------------------|---------|
| TRUCK DRIVER (Underground construction) | | |
| AREA 1 | | |
| GROUP 1..... | \$ 21.97358.65/wk+55.00/day | |
| GROUP 2..... | \$ 22.06358.65/wk+55.00/day | |
| GROUP 3..... | \$ 22.27358.65/wk+55.00/day | |
| AREA 2 | | |
| GROUP 1..... | \$ 22.27358.65/wk+55.00/day | |
| GROUP 2..... | \$ 22.41358.65/wk+55.00/day | |
| GROUP 3..... | \$ 22.60358.65/wk+55.00/day | |

PAID HOLIDAYS: New Year's Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day and Christmas Day.

SCOPE OF WORK: Excavation, site preparation, land balancing, grading, sewers, utilities and improvements; also including but not limited to, tunnels, underground piping, retention, oxidation, flocculation facilities, conduits, general excavation and steel sheeting for underground construction. Underground construction work shall not include any structural modifications, alterations, additions and repairs to buildings or highway work, including roads, streets, bridge construction and parking lots or steel erection.

TRUCK DRIVER CLASSIFICATIONS

GROUP 1: Truck driver on all trucks (EXCEPT dump trucks of 8 cubic yards capacity or over, pole trailers, semis, low boys, Euclid, double bottom and fuel trucks)

GROUP 2: Truck driver on dump trucks of 8 cubic yards capacity or over, pole trailers, semis and fuel trucks

GROUP 3: Truck driver on low boy, Euclid and double bottom

SUMI2002-001 05/01/2002

| | Rates | Fringes |
|--|----------|---------|
| Flag Person..... | \$ 7.25 | |
| LINE PROTECTOR (ZONE 1: GENESEE, MACOMB, MONROE, OAKLAND, WASHTENAW AND WAYNE).... | \$ 18.98 | 9.57 |
| LINE PROTECTOR (ZONE 2: | | |

STATEWIDE (EXCLUDING GENESEE,
 MACOMB, MONROE, OAKLAND,
 WASHTENAW AND WAYNE).....\$ 17.14 10.02

Pavement Marking Machine
 (ZONE 1: GENESEE, MACOMB,
 MONROE, OAKLAND, WASHTENAW
 AND WAYNE COUNTIES)
 Group 1.....\$ 23.72 9.57

Pavement Marking Machine
 (ZONE 1: GENESEE, MACOMB,
 MONROE, OAKLAND, WASHTENAW
 AND WAYNE)
 Group 2.....\$ 21.35 9.57

Pavement Marking Machine
 (ZONE 2: STATEWIDE (EXCLUDING
 GENESEE, MACOMB, MONROE,
 OAKLAND, WASHTENAW AND WAYNE
 COUNTIES)
 Group 1.....\$ 21.42 10.02

Pavement Marking Machine
 (ZONE 2: STATEWIDE (EXCLUDING
 GENESEE, MACOMB, MONROE,
 OAKLAND, WASHTENAW AND WAYNE)
 Group 2.....\$ 19.28 10.02

WORK CLASSIFICATIONS:

PAVEMENT MARKER GROUP 1: Drives or operates a truck mounted
 striper, grinder, blaster, groover, or thermoplastic melter
 for the placement or removal of temporary or permanent
 pavement markings or markers.

PAVEMENT MARKER GROUP 2: Performs all functions involved for
 the placement or removal of temporary or permanent pavement
 markings or markers not covered by the classification of
 Pavement Marker Group 1 or Line Protector.

LINE PROTECTOR: Performs all operations for the protection or
 removal of temporary or permanent pavement markings or
 markers in a moving convoy operation not performed by the
 classification of Pavement Marker Group 1. A moving convoy
 operation is comprised of only Pavement Markers Group 1 and
 Line Protectors.

WELDERS - Receive rate prescribed for craft performing
 operation to which welding is incidental.

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Unlisted classifications needed for work not included within
 the scope of the classifications listed may be added after
 award only as provided in the labor standards contract clauses
 (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is union or non-union.

Union Identifiers

An identifier enclosed in dotted lines beginning with characters other than "SU" denotes that the union classification and rate have found to be prevailing for that classification. Example: PLUM0198-005 07/01/2011. The first four letters , PLUM, indicate the international union and the four-digit number, 0198, that follows indicates the local union number or district council number where applicable , i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2011, following these characters is the effective date of the most current negotiated rate/collective bargaining agreement which would be July 1, 2011 in the above example.

Union prevailing wage rates will be updated to reflect any changes in the collective bargaining agreements governing the rates.

0000/9999: weighted union wage rates will be published annually each January.

Non-Union Identifiers

Classifications listed under an "SU" identifier were derived from survey data by computing average rates and are not union rates; however, the data used in computing these rates may include both union and non-union data. Example: SULA2004-007 5/13/2010. SU indicates the rates are not union majority rates, LA indicates the State of Louisiana; 2004 is the year of the survey; and 007 is an internal number used in producing the wage determination. A 1993 or later date, 5/13/2010, indicates the classifications and rates under that identifier were issued as a General Wage Determination on that date.

Survey wage rates will remain in effect and will not change until a new survey is conducted.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

**REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS**

- I. General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Compliance with Governmentwide Suspension and Debarment Requirements
- XI. Certification Regarding Use of Contract Funds for Lobbying

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under

this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are

applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar

with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurance Required by 49 CFR 26.13(b):

a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.

b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.

11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on [Form FHWA-1391](#). The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor

will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions

of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b. (1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is utilized in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or

will notify the contracting officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program. Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and basic records

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-

Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

b.(1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly

rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

6. Subcontracts. The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility.

a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.

3. Withholding for unpaid wages and liquidated damages. The FHWA or the contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

4. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:

(1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;

(2) the prime contractor remains responsible for the quality of the work of the leased employees;

(3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and

(4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is

evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.

2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200.

1. Instructions for Certification – First Tier Participants:

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this

covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

* * * * *

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which

this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the

department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

* * * * *

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

**ATTACHMENT A - EMPLOYMENT AND MATERIALS
PREFERENCE FOR APPALACHIAN DEVELOPMENT
HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS
ROAD CONTRACTS**

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.