

20240403 – April Specifications Committee Meeting

April Specifications Committee Meeting Agenda

Meeting Date

Wednesday, April 3, 2024 @ 9:00am

Meeting Location: 1334 Smith Street, Charleston, WV in Lower Level Conference

Also meeting virtually via Google Meet video conference. E-mail distribution message includes instruction.

2023 Standard Specification Roads and Bridges

Print Version:

WVDOH Employees-contact us or stop by Technical Support

Industry-We have an order form on our webpage here:

https://transportation.wv.gov/highways/TechnicalSupport/specifications/Documents/SpecBookOrderForm_20230925.pdf

2024 Supplemental Specifications

The 2024 Supplemental is posted on our webpage.

<https://transportation.wv.gov/highways/TechnicalSupport/specifications/Pages/default.aspx>

Approved Permanent Specification changes from last Committee meeting (02/07/24)

- Two Specification updates for transverse grooving to align with IGGA recommendations.
 - **601.11.4.4.1-Transverse Grooving**
 - **679.5.2.1-Transverse Grooving**
- **688.6.2.1-Spent Material:** Revision updates laboratory certification requirements for “spent materials”.
- **712.4-Galvanized Steel Deep Beam Guardrail Fasteners and Anchor Bolts:** Revision adds MP reference and AASHTO Product Evaluation and Audit Solutions.
- **715.5-Packaged Dry Hydraulic Cement Grout (Non-Shrink):** Adds statement about test data from an independent AASHTO accredited lab.

Approved Project Specific Special Provisions (SP) from last Committee meeting (02/07/24)

- **None**

Items removed from Committee Agenda

- **None**

Old Business-Provisions discussed at last Committee meeting

SECTION	TITLE	DESCRIPTION
<u>636</u>	SP636-Digital Speed Limit Trailer	5th time to Committee; discussed in August, October, December and February. Project Specific Special Provision for Digital Speed Limit Trailer on high speed, multi-lane highways, work areas.

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	J. Adkins	The Special Provision has been updated per comments from the last meeting. It is redline copy showing the revisions.
<u>720</u>	720.3.2-Quality Assurance (QA) Testing V. Allison	3rd time to Committee; discussed in December and February. Specification change to Section 720-Smoothness Testing. The revision updates the turnaround time for testing. Updates per comments at the last meeting; it is redline copy showing the revisions.
<u>108</u>	SP108-Procescution and Progress S. Smith	2nd time to Committee; discussed in February. Update to previously approved Project Specific Special Provision for Failure to Complete on Time and Liquidated Damages. Updates made to the special provision; it is the redline copy showing the revision. Approval is expected in April.
<u>204</u>	204.5-Basis of Payment S. Boggs	2nd Time to Committee; discussed in February. Specification change to 204-Mobilization. The revision is to clarify when the mobilization payment is made. No update to the specification; it is the redline copy showing the revision. Approval is expected in April.
<u>601</u>	601.3.2.2-Air Content A. Gillispie	2nd time to Committee; discussed in February. Specification change to 601-Structural Concrete. The revision ensures air content testing is completed before the concrete pump for concrete placement using the pumping method. No update to the specification; it is the redline copy showing the revision. Approval is expected in April.

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636	636.6.2-Shadow Vehicle 715.41.4-Truck Mounted Attenuator (TMA) and Trailer Truck Mounted Attenuator (TTMA) T. Whitmore	2nd time to Committee; discussed in February. Two Specification changes to 636-Maintaining Traffic and 715-Miscellaneous Materials. The revision updates Truck Mounted Attenuator (TMA) and Trailer Truck Mounted Attenuator (TTMA) to meet MASH Test Level 3 requirements. 1. 636.6.2-Shadow Vehicle 2. 715.41.4-Truck Mounted Attenuator (TMA) and Trailer Truck Mounted Attenuator (TTMA) No update to the specification; it is the redline copy showing the revision. Approval is expected in April.
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New Business – New Provisions for Spec Committee

SECTION	TITLE	DESCRIPTION
	SP-Civil Rights and Labor (CRL) D. Ballard	1st time to Committee The purpose of this SP is to notify contractors and subcontractors that they will be required to electronically submit certified payrolls and subcontractor payments utilizing the Civil Rights & Labor (CRL) module within the AWP system. The SP addresses CRL system requirements and access procedures, payroll submission/import methods, and subcontractor payment submission requirements.
SP406	SP406-High Friction Surface Treatment K. Baranowski	1st time to Committee The purpose of this SP is to include language as it should pertain to a bridge deck, specifically, and in-service bridge deck that has cracking. The SP addresses the widespread bridge deck cracking and then applies the High Friction Surface Treatment. Overall, This provides an overlay that includes high friction for safety purposes and takes care of the cracks.

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715	715.42.10.5-PVC-Coated, Galvanized Rigid Conduit G. Mullens	1st time to Committee Specification Change to Section 715-Miscellaneous Materials. After several years listed as plan notes, the update adds the subsection to 715.42.10-Electrical Conduit to help create an APL and aid in the materials finalization process. The specification is redline copy showing the revision.
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2024 Specifications Committee

The Specification Committee typically meet every other month; on the first Wednesday at 9:00am. 2024 meetings will be held in **February (2/7), April (4/3), June (6/5), August (8/8), October (10/2), and December (12/4).**

Calendar subject to change, updates will be given, as needed.

Deadline for new items & updates to these provisions is **March 3, 2024.**

If you are the 'champion' of any specification changes and/or project specific special provisions currently in the Specification Committee, it is your responsibility to edit/update/modify them in a timely manner per comments and discussion in Spec Committee. *Failure to submit updates may result in removal of item and/or delays.*

Comments

Comments are requested for Specifications Changes and Project Specific Special Provisions as they help in the decision-making process. Please send comments by Friday prior to the meeting!

Please Send Comments to either: Steve.D.Boggs@wv.gov
Janie.M.Adkins@wv.gov

File Format Structure and Progression of items thru Specifications Committee

The purpose of the below protocol is to provide guidance on the file structure of Proposed Specifications & Project Specific Provisions as they progress thru Specifications Committee.

This procedure would facilitate a means of tracking changes from meeting to meeting; as the agenda & provisions are posted publicly online on the Spec Committee website.

TYPES OF PROVISIONS:

There are three standard types of provisions typically discussed in committee:

1. **Specification Changes** – These are permanent changes to the WVDOH Standard Specifications.
 - Unless inserted into a project proposal, these changes typically go into effect in January (of subsequent year) with the Supplemental Specifications
2. **Project Specific Special Provisions (SP)** – Are applied to specifically designated projects.

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3. **Updates to previously approved SP** – Changes/edits/updated to SP that have been approved by spec committee.

NEW BUSINESS ITEMS:

New items should be setup & submitted in the following format along with a brief overview of the item or reason for the change:

1. **Specification Changes** – Show as red-line copy (see note)
2. **Project Specific Special Provisions (SP)** – Will be shown in all black.
3. **Updates to approved SP** – Shown as red-line copy.

NOTE: Red-line copy is a form of editing which indicates removal or addition of text. You can redline a Microsoft Word document by using the built-in “Track Changes” feature or you can manually redline document with font color changes & strike-through.

OLD BUSINESS ITEMS:

Updated provisions that were discussed at the last committee meeting should be setup in the following format:

- Redline copy from prior meeting would not be shown
- Redline copy of new changes/updates (from previous meeting)

PROGRESSION OF ITEMS THRU COMMITTEE AND APPROVAL:

Depending on how important the project and/or comments/discussion of item at previous meeting, then several things can happen in no particular order.

- Few comments/discussion/minor changes...will recommend approval of item at next meeting
- A lot of comments/discussion...will not recommend approval at next meeting; item will be updated and reviewed again at the next meeting.
- SP's in committee may be used in advertised project. Hope to work to address comments & finish approving at subsequent meeting.

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

SPECIAL PROVISION

FOR

STATE PROJECT NUMBER: _____

FEDERAL PROJECT NUMBER: _____

**SECTION 636
MAINTAINING TRAFFIC**

636.19-PORTABLE MESSAGE SIGNS:

636.19.3-Sign Types:

ADD THE FOLLOWING SUBSECTION:

636.19.3.3-Digital Speed Limit Trailer: A Digital Speed Limit Trailer (DSLTL) shall conform to the general requirements of 636.19. The DSLTL shall incorporate a standard speed limit sign per MUTCD sign designation R2-1. The size of the R2-1 shall be a minimum of 48-inches by 60-inches. The background sheeting used to fabricate the R2-1 shall meet the requirements of ASTM D4956 IV, VIII, IX, or XI. The static message numerical portion of the R2-1 shall be replaced with the digital display panel. The DSLTL support structure shall provide for a minimum R2-1 mounting height of 7-feet above the roadway.

The DSLTL shall also incorporate beacons. One beacon shall be located immediately above and below the R2-1 sign and “Work Zone” plaque. Each beacon shall consist of a circular yellow signal indication having a minimum nominal diameter of 8-inches. The beacons shall be vertically aligned and centered horizontally with the R2-1 sign. The edge of each beacon housing shall be located no closer than 12-inches outside of the nearest edge of the R2-1 sign or “Work Zone” plaque. The DSLTL shall be programmed such that each beacon will be flashed at a rate of not less than 50 or more than 60 times per minute. The illuminated period of each flash shall be a minimum of 1/2 and a maximum of 2/3 of the total cycle for each beacon. The DSLTL shall incorporate automatic adjustment of the luminance of the beacons under varying light conditions. The DSLTL shall provide the user the option of turning the beacons off or alternately flashing the beacons while the display is in operation.

Each DSLTL shall have remote communication capabilities using a cellular modem allowing the user to change the displayed speed remotely using manufacturer provided

software. In addition, each separate DSLT shall have the ability for the user to change the displayed speed manually at the device. Each DSLT shall provide the user with the ability to monitor the battery level both remotely using the manufacturers provided software, provided there is cellular coverage where the device is placed, and manually at the device. Each device shall provide the user the ability to manually charge the battery if necessary. The DSLT shall have a twenty (20) day minimum autonomy with flashers functioning.

The DSLT shall be charged at all times and maintained in proper working conditions. If one or more of the devices stops functioning due to neglect by the Contractor to properly maintain the device and not replaced or repaired within 36 hours a penalty of \$500 per calendar day shall be applied. If the DSLT is non-functional due factors outside the control of the Contractor the penalty shall not apply (an example such as vehicle impact and vandalism), however repair or replacement shall be within 48 hours.

~~Unless otherwise requested by the Engineer, the Contractor shall submit a weekly report documenting the changes to the display to the Engineer.~~

636.19.4-Placement:

DELETE THE SUBSECTION TITLE AND CONTENTS AND REPLACE WITH THE FOLLOWING:

636.19.4-Placement, Operation, Removal, and Documentation: Placement of and messages displayed on portable message signs shall be approved by the Engineer. Portable message signs are not to be placed where they conflict with one another. Plan placement locations may be adjusted as needed in the field, with the Engineer's approval, in order to achieve greater advance sight distance and/or to utilize other existing devices or terrain features such as temporary barrier, guardrail, or benches to shield the device from impacts provided the device maintains the operational function as intended by the placement location shown in the plans. A minimum sight distance of 800 feet should be achieved if possible. Devices placed behind concrete barriers or guardrail should be placed at and behind the downstream end of such features if possible. Unless specified in the plans, portable message signs shall not be located within a transition or taper.

Portable message signs that in the judgement of the Engineer are not adequately shielded from impacts by utilizing barriers or terrain as described above shall be delineated with traffic cones, channelizer cones, or drums on the approach to them. The delineation devices shall be tapered from the outside edge of the paved shoulder, or outside edge of the device if no paved shoulder exists, at a spacing of twenty-five (25) feet. The length of the taper shall be 150-feet and shall end fifty (50) feet in advance of the device. The remaining fifty (50) feet leading up to the device shall be delineated with a minimum of three (3) additional delineation devices placed inside of the inside edge of the device and tangent to the roadway. Additionally, such devices shall be operational at all times to provide clear visibility. This shall include time periods allowed herein when such devices are temporarily no longer needed to serve their intended function of contributing to the efficient or safe operation of the work zone but are temporarily allowed to remain in place. In such cases, Changeable Message Signs shall be set to flashing warning mode or shall display an alternative generic message approved by the Engineer if a specific informational message is not currently required.

Changeable Message Signs not adequately shielded and not expected to be needed for an entire daylight period or for more than four (4) hours at night shall be temporarily relocated to a shielded location or other location off the shoulder, either of which shall be approved by the Engineer.

In cases where the work zone speed limit in effect through the work area is reverted to the normal posted speed limit in accordance with the specifications below, and a reduced work zone speed limit is not to be reinstated within 72-hours, all DSLT's and Speed Monitoring Trailers not adequately shielded shall be relocated as specified above for Changeable Message Signs and the coverings on existing post mounted static speed limit signs displaying the normal posted speed limit shall be uncovered if directed by the Engineer. If the time period between reverting to the normal posted speed limit and reinstatement of a reduced work speed limit exceeds fourteen (14) days, all Speed Monitoring Trailers and DSLT's shall be removed from the project and payment for all such devices will cease until the devices are again necessary and reinstalled.

If specified in the plans, the work zone speed limit displayed on the Speed Monitoring Trailers and the DSLT displays shall be adjusted under different work zone conditions in accordance with the instructions in the plans. Plan specified upward adjustments of the speeds displayed on these devices shall only be implemented after obtaining additional concurrence from the project Engineer. The project Engineer may, based on project specific circumstances not contemplated by the plans, direct the Contractor to not upwardly adjust the work zone speed limit.

Portable message signs shall not be activated, deactivated, or have their displayed message automatically changed using a pre-programmed schedule.

Unless otherwise requested by the Engineer, the Contractor shall submit a weekly report to the Engineer documenting dates and times of any changes to portable message signs including location and displayed message.

~~— Portable message signs shall be turned off with no active displays or operating beacons when being transported. Portable message signs that are not adequately shielded from impacts by utilizing barriers or terrain as described herein to the satisfaction of the Engineer shall be operational at all times to provide clear visibility. This shall include time periods allowed herein when such devices are temporarily no longer needed to serve their intended function of contributing to the efficient or safe operation of the work zone. During such time periods the Contractor shall modify the speed displayed on the Speed Monitoring Trailer static speed limit signs and the DSLT displays accordingly if the speed limit in effect through the work area is changed to a higher work zone speed limit or the normal posted speed limit. In addition, Changeable Message Signs shall be set to flashing warning mode or shall display an alternative generic message approved by the Engineer if a specific informational message is not currently required. If the Speed Monitoring Trailers and/or Changeable Message Signs are not expected to be needed for an entire daylight period or for more than four (4) hours at night, these devices shall be temporarily relocated to a shielded location or other location off the shoulder, either of which shall be approved by the Engineer. If the speed limit in effect through the work area is reverted to the normal posted speed limit and the reduced work zone speed limit is not reinstated within 72-hours, all DSLT's not adequately shielded shall be relocated as specified above and coverings on existing post mounted static speed limit signs displaying the normal posted speed limit shall be uncovered at the direction of the Engineer.~~

~~ADD THE FOLLOWING AFTER THE FIRST PARAGRAPH:~~

~~—The exact placement and any relocations of a DSLT will be as directed by the Engineer. Unless otherwise directed by the Engineer and approved by the Traffic Engineering Division, the work zone speed limit referenced in the plans, shall be displayed on the DSLT when workers are present. However, when workers are not present in the work zone, the design speed shall be based on the original posted speed limit or the warranted speed limit reduction for when workers are not present. The digital display legends and Speed Limit Sign Beacons on the DSLT Sign Assemblies shall not be automatically changed/activated/deactivated using a pre-programmed schedule.~~

~~—If the normal posted speed limit remains in effect for more than fourteen (14) days, the DSLT's shall be removed from the project and the Division will no longer pay for the item. In addition, the normal static speed limit signs shall be uncovered.~~

636.23-METHOD OF MEASUREMENT:

636.23.22-Portable Message Signs:

DELETE THE CONTENTS OF THE SUBSECTION AND REPLACE WITH THE FOLLOWING:

636.23.22.1- Changeable Message Sign: The quantity of “Changeable Message Sign” shall be the actual number of days that the sign is used on the project.

636.23.22.2- Speed Motoring Trailer: The quantity of “Speed Motoring Trailer” shall be the actual number of days that the sign is used on the project.

636.23.22.3- Digital Speed Limit Trailer: The quantity of “Digital Speed Limit Trailer” shall be the actual number of days that the sign is used on the project.

636.25-PAY ITEMS:

ADD THE ITEM TO THE TABLE:

ITEM	DESCRIPTION	UNIT
636031-*	Digital Speed Limit Trailer	Day

Appendix 636A. This sheet is not required with PS&E submission.:

Designer Note: This specification requires use of Digital Speed Limit Trailers (DSLTL) in lieu of Work Zone Speed Limit When Flashing static signing on projects. It is intended for only specified projects which meet criteria below.

- The ADT of the Interstate or expressway is 25,000 or greater.
- The normal posted speed limit of the Interstate or expressway is 50 MPH or greater.
- Work zone speed limits are expected to be in effect at any locations along the mainline of the Interstate or expressway for a total of thirty (30) complete days or more during the duration of the project.
- The work zone length is a minimum of three (3) miles.

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

SUPPLEMENTAL SPECIFICATION

FOR

SECTION 720 SMOOTHNESS TESTING

720.1-DESCRIPTION:

To measure and evaluate the ride quality of pavement surfaces in accordance with the International Roughness Index (IRI), as well as the most recent forms of AASHTO R-56, AASHTO M328, and AASHTO R-57.

720.2-EQUIPMENT:

720.2.1-High-Speed or Low Speed Inertial Profiler: Provide a high-speed or low speed inertial profiler for measuring and evaluating the ride quality of pavement surfaces. The inertial profiler shall be certified at a facility approved by the Materials Control, Soils and Testing Division (MCS&T). Certification facilities should conduct the evaluation in accordance with the most recent edition of AASHTO R-56 "Standard Practice for Certification of Inertial Profiling Systems". All inertial profilers shall be maintained in accordance with the most recent edition of AASHTO M 328 "Standard Specifications for Inertial Profiler" Calibration and verification shall be done in accordance with MP 720.10.0. The Contractor shall submit equipment certification documentation after becoming certified or after recertification. Proof of equipment certification shall be available upon request.

720.2.2-Inertial Profiler Operator Certification: Certification through the Material Control, Soils and Testing Division shall be required to operate an inertial profiler in the State of West Virginia. The operator shall pass a written exam administered by MCS&T. All operators receiving a passing score on the written exam will be placed on the WVDOH Materials Certification Directory that is found on the MCS&T webpage. Certification shall be for a period of three years. Certified operators shall contact MCS&T for certification renewal.

720.3-RIDE QUALITY TESTING:

720.3.1-Quality Control (QC) Testing: QC testing on ~~NHS routes~~ all eligible projects is the responsibility of the Contractor. QC testing shall be completed in accordance with MP 720.10.01 Section 8 and shall be completed no later than ~~fourteen (14)~~ thirty (30) calendar days after all lanes are continuously open to traffic. Data collection shall be done by a certified inertial profiler and certified inertial profiler operator (See 720.2.1 and 720.2.2;). Collected profile data shall be submitted to ~~the project engineer~~ the DOH MCS&T roadway inbox DOHMCSnTRoadway@wv.gov in accordance with MP 720.10.01 Section 10 within ~~five (5)~~

seven (7) calendar days of testing. Price adjustments will be calculated according to Contractor's QC data unless QA testing determines otherwise.

~~**720.3.2 Quality Assurance (QA) Testing:** QA testing is the responsibility of the Division. The Engineer shall submit a "Bridge and Pavement Testing Request Form" form to MCS&T via email, within five (5) calendar days after all lanes are continuously open to traffic. Within fourteen (14) calendar days from receiving the request, the Division will conduct QA testing. The Division will use a certified inertial profiler and certified operator for QA testing.~~

720.3.32-Quality Assurance ~~Verification~~ (QAV) Testing: QAV testing is the responsibility of the Division. ~~The Division's profile data and the Contractor's profile data will be compared to determine the IRI differences. Final project price adjustments will be made using the Contractor's profile data if the IRI differences are within the allowable limits outlined in Table 720.3.3. The Contractor shall submit a pavement testing request form to MCS&T to the DOH MCS&T roadway inbox DOHMCSnTRoadway@wv.gov within five (5) days after all lanes are continuously open to traffic. QA testing will be completed in accordance with MP 720.10.01 Section 8 and should be completed no later than thirty (30) calendar days after receiving the pavement testing request from the Contractor, or within 30 days of the Contractor's QC test. In the event QA testing cannot be completed within thirty (30) days of QC testing, price adjustments will be calculated solely based on QC data. The Division will perform testing using a certified inertial profiler and a certified inertial profiler operator in accordance with the most recent edition of AASHTO R 56 "Standard Practice for Certification of Inertial Profiling Systems".~~

720.3.3-QA Testing Comparison: The Division's profile data and the Contractor's profile data will be compared to determine the IRI differences. Final project price adjustments will be made using the Contractor's profile data if the IRI differences are within the allowable limits outlined in Table 720.3.3. If the QA testing IRI differences do not meet the maximum allowable difference from Table 720.3.3, QA testing data will be used for final price adjustments. This Comparison is only applicable if both profiles are completed within thirty (30) days of each other.

TABLE 720.3.3
QAV Testing Allowable IRI Differences

Contractor's IRI Mean (in/mi)	Maximum Allowable Differences
50.0 or Less	8.5% of Contractor's IRI Mean
50.1 to 150.0	6.0% of Contractor's IRI Mean
150.1 or Greater	7.0% of Contractor's IRI Mean

~~**720.3.4 Referee Testing:** Referee testing is the responsibility of the Division. If the QAV testing IRI differences does not meet the maximum allowable difference from Table 720.4.3, the Division will perform referee testing using a certified inertial profiler and a certified inertial profiler operator in accordance with the most recent edition of AASHTO R 56 "Standard Practice for Certification of Inertial Profiling Systems". The profile data from the referee test shall be used in determining the final project price adjustments.~~

~~**720.3.4.1 Referee Data:** If the referee test data still does not meet the allowable IRI differences MCS&T can recommend the Contractor recertify their inertial profiler and inertial profiler operator that was used on the project.~~

720.3.54-Testing After Repairs: Should repairs be needed to the surface from the defects in the pavement prior to project closeout, QA ~~and QAV~~ testing shall be conducted after all repairs are made. This will be the final tested value for the lot.

720.4-RIDE QUALITY ANALYSIS:

720.4.1-Data Location: The average IRI number used in ride quality analysis shall be the mean roughness index (MRI) which is the average IRI of both the left and right wheel path. Analysis shall be done in accordance with MP 720.10.01 Section 9.

720.4.2-Omitted Sections: Bridge Structures and any sections tested which are not included in the pavement project shall be removed from the Smoothness Analysis. These removed bridges and sections shall also include a Lead-In and Lead-Out distance to be removed from the Ride Quality Analysis. The Lead-In distance shall be two hundred (200) feet and the Lead-Out distance shall be two hundred (200) feet.

720.4.3-Sampling Lots: The pavement shall be divided into sampling lots of one-tenth (0.1) lane mile each. Each Lot shall have a smoothness measurement, expressed in inches per mile (in./mi.).

720.4.3.1-Special Cases for Sampling Lots Less Than One-Tenth (0.1) Lane Mile: In some cases, sampling, lots of one tenth (0.1) lane mile will not be attainable. These cases include areas at the end of the project as well as areas that are before the ‘lead in’ length of bridges. If these areas are less than five-hundredths (0.05) of a lane mile that will be eliminated from Smoothness analysis. If these areas are more than five-hundredths (0.05 mile) lane mile these areas will be included in analysis and pay adjustments will be prorated to the nearest one hundredth (0.01) mile. ~~This shall apply to all projects governed by Section 720.~~

720.5-NATIONAL HIGHWAY SYSTEM (NHS) PAVEMENT PROJECT:

Pavement projects located on any NHS route and greater than 0.2 miles of continuous new pavement shall be tested with a high-speed or low speed inertial profiler certified in accordance with Section 720.2.

720.5.1-Determining National Highway System Routes: The NHS map should be used when determining if a route is on the National Highways System. This tool can be found online at the following link:
<https://wvdot.maps.arcgis.com/apps/dashboards/88e87932344946408b7c17f1bd454752>

720.5.2-Schedule 1 NHS Pavement Projects: NHS pavement projects with a total new pavement thickness of four (4) inches or greater shall be classified as Schedule 1 NHS Pavement Projects. The final price adjustments for Schedule 1 NHS Pavement Projects shall be determined using the calculations shown in Table 720.5.2.

TABLE 720.5.2
Schedule 1 NHS Pavement Projects

IRI for each 0.1-mile section (in/mi)	Price Adjustment (\$)
65.0 or Less	0
65.1 to 95.0	<u>1,300</u> - 20(IRI) + <u>1,300</u>
95.1 or Greater	Corrective Action Required

720.5.2.1-Corrective Action for Schedule 1 NHS Pavement Projects: Corrective action shall be required for Schedule 1 NHS Pavement Projects having an IRI greater than 95.1 in/mi. Corrective action shall be performed using diamond grinding, micro milling, or other work methods approved by the Engineer.

720.5.3-Schedule 2 NHS Pavement Projects: NHS pavement projects with a total new pavement thickness three (3) inches or greater and less than four (4) inches shall be classified as Schedule 2 NHS Pavement Projects. The final price adjustments for Schedule 2 NHS Pavement Projects shall be determined using the calculations shown in Table 720.5.3.

TABLE 720.5.3
Schedule 2 NHS Pavement Projects

IRI for each 0.1-mile section (in/mi)	Price Adjustment (\$)
80.0 or Less	0
80.1 to 120.0	1,200 - 15(IRI)
120.1 or Greater	-600

720.5.4-Schedule 3 NHS Pavement Projects: NHS pavement projects with a pavement thickness less than three (3) inches and more than one (1) inch shall be classified as Schedule 3 NHS Pavement Projects. The final price adjustments for Schedule 3 NHS Pavement Projects shall be determined using the calculations shown in Table 720.5.4.

TABLE 720.5.4
Schedule 3 NHS Pavement Projects

IRI for each 0.1-mile section (in/mi)	Price Adjustment (\$)
80.0 or Less	0
80.1 to 120.0	1,200 – 15 (IRI)
120.1 or Greater	-600

720.6-NON-NATIONAL HIGHWAY SYSTEM PAVEMENT PROJECTS:

Pavement projects located on any Non-NHS routes shall be tested with equipment outlined in 720.2.1, 720.2.2 and 720.3 if the project meets all four of the following requirements:

1. Resurfacing is the primary project type
2. Greater than 1 mile of continuous pavement;
3. Edge lines and center line on the new pavement in accordance with Section 663.
4. Thickness of one inch (1) or more of new pavement (including scratch if used)

720.6.1-Ride Quality Analysis Before Project: Non-NHS pavement projects shall be tested before the pavement project begins. Any new construction of a Non-NHS route will be evaluated as an NHS route according to 720.5.

720.6.2-Data Source Collection After Project Completion: The data-source collection after project completion shall be collected by the Division's high-speed or low speed inertial profiler as referenced in 720.3.2. On non-NHS routes Quality Control Testing is optional for the contractor. If QC testing is performed, it shall follow the process outlined in section 720.3.

720.6.3-Final Price Adjustments for Non-NHS: If the average ~~percent~~ percent improvement for the entire project is 30.1% or more, no price adjustment will be assessed for the project. If the average percent improvement for the entire project is 30.0% or less, then each 0.1 mile lot that has an IRI of 80.1 or greater, will be penalized based on the following table. Table 720.6.3.

**TABLE 720.6.3
Non-NHS Pavement Projects**

IRI for each 0.1-mile section (in/mi)	Price Adjustment (\$ per 0.1-mile Section)
80.1 – 170.0	320 - 4(IRI)
170.1 or Greater	-360

Where:

$$\text{Percent Improvment (\%)} = \frac{\text{Before IRI of Lot} - \text{After IRI of same Lot}}{\text{Before IRI of Lot}} \times 100$$

720.7- PROJECTS THAT DO NOT FALL UNDER PREVIOUS CHARACTERIZATIONS:

At the discretion of the Engineer pavement projects not falling into any of the other classifications shall be measured and evaluated for ride quality analysis under the direction of the Engineer. If recommended by the Engineer this shall be done by the Contractor with a ten (10) foot straightedge. There will not be any pay adjustments based on Smoothness for these projects.

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

SPECIAL PROVISION

FOR

STATE PROJECT NUMBER: _____

FEDERAL PROJECT NUMBER: _____

**SECTION 108
PROSECUTION AND PROGRESS**

108.6-DETERMINATION AND EXTENSION OF CONTRACT TIME:

108.6.2-Extension of Contract Time:

108.6.2.1-Excusable Noncompensable Delays:

DELETE BULLET FIVE (5) AND REPLACE WITH THE FOLLOWING:

5. Delays due to adverse weather. Lost days due to adverse weather may include:
 - (1) Days with inclement weather or conditions beyond the Contractor's control that prevent the involvement of their normal working forces engaged in performing critical or controlling item(s) of work for at least sixty (60) percent (60%) of the total scheduled daily hours, and
 - (2) Days when weather conditions prevent work from beginning at the regular time and the crew is dismissed, regardless of whether or not conditions improve for the rest of the day.

An adjustment of Contract time shall not be considered for loss of time due to adverse weather:

- a. Before the start of construction operations;
- b. During periods when no on site- work on a controlling operation or critical path activity occurs;
- ~~c. After November 30 and before April 1 of the following year;~~
- ~~d.c.~~ After the Contract completion date or the Revised Contract completion date.

108.7-COMPLETION DATES:

108.7.1-Failure to Complete on Time and Liquidated Damages:

DELETE THE SECOND PARAGRAPH AND REPLACE WITH THE FOLLOWING:

Therefore, for each calendar day the project is deemed not to be Substantially Complete after the Contract Time specified for completion of the work, subject to such extensions of contract time required or permitted in 108.6, the Division will assess liquidated damages against the Contractor. Daily charges will be deducted for each calendar day, as defined in 101.2 on all contracts. The total amount of daily charges will be deducted from any monies due the Contractor, not as a penalty but as liquidated damages. Unless specified elsewhere in the Contract, the amount of the daily charge will be calculated using Table 108.7.1 on the date of the project letting.

~~An adjustment of Contract time will be considered for loss of time due to adverse weather.~~

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

SUPPLEMENTAL SPECIFICATION

FOR

**SECTION 204
MOBILIZATION**

204.5-BASIS OF PAYMENT:

DELETE THE CONTENTS OF BULLET ii. AND REPLACE WITH THE FOLLOWING:

- ii. 2.5% of the original contract amount or the remaining 50% of the amount bid for mobilization, whichever is less, shall be released with the estimate payable ~~30~~28 days after the first estimate.

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

SUPPLEMENTAL SPECIFICATION

FOR

**SECTION 601
STRUCTURAL CONCRETE**

601.3-PROPORTIONING:

601.3.2-Field Tolerances and Adjustments:

601.3.2.2-Air Content:

DELETE THE SUBSECTION AND REPLACE WITH THE FOLLOWING:

The target value of the entrained air at the point of placement shall be as shown in Table 601.3.1A. However, when pumping concrete, the air content shall be measured before the concrete pump, and the target value of the entrained air shall be as shown in Table 601.3.1A at that point. If the entrained air does not conform with the target value within plus or minus 2.5 percentage points, the Contractor shall take immediate steps to adjust the air content of succeeding loads by making necessary adjustments in the mixture. The air content shall be measured on loads already batched and enroute, as well as the first load to which any adjustments were made in batching procedures. If the air content exceeds the target value plus 3.0 percentage points the concrete shall be rejected. When the concrete is delivered in a truck mixer and the air content is less than the target value minus 2.5 percentage points the concrete shall be rejected, or the Contractor may use additional air entraining agent in an amount that is intended to achieve the target value specified. The addition is permitted under the conditions listed below.

The target of the entrained air content of Class H concrete at the time of placement shall be as shown in Table 601.3.1A. If the entrained air does not conform with the target value within plus or minus 1.5 percentage points, the Contractor shall take immediate steps to adjust the air content of succeeding loads by making necessary adjustments in the mixture. If the entrained air content of Class H concrete does not conform to the target value plus 2.0 percentage points, the concrete shall be rejected. When Class H concrete is delivered in a truck mixer and the air content is less than the target value minus 2.0 percentage points, the concrete shall be rejected, or the Contractor may use additional air-entraining agent in an amount that is intended to achieve the target value specified. The addition is permitted under the conditions listed below.

- i. The air entraining agent is the same as used in the approved mix design and is thoroughly mixed with a minimum of 2 gallons of water. The solution will be directed to the front of the mixer.
- ii. The mixer is turned a minimum of 30 revolutions, at mixing speed, or the

number of revolutions established in tests to comply with uniformity requirements, whichever is more.

Immediately after mixing, the air content and slump shall be measured by a certified inspector ~~or technician~~.

An air adjustment may be attempted twice per truck. If after the second addition the specified air content is not achieved, the concrete shall be rejected. These procedures do not alter the limits placed on time to discharge, the total revolutions of the mixing drum, or the specified slump.

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

SUPPLEMENTAL SPECIFICATION

FOR

**SECTION 636
MAINTAINING TRAFFIC**

636.6-PILOT TRUCK AND DRIVER OR SHADOW VEHICLE:

636.6.2-Shadow Vehicle:

DELETE THE CONTENTS OF THE FOURTH PARAGRAPH AND REPLACE WITH THE FOLLOWING:

~~Test Level 2 devices listed on the MASH APL may only be utilized on roadways with a normal posted speed limit of forty (40) MPH or less. All TMA's and TTMA's shall meet MASH Test Level 3 requirements regardless of the work zone speed limit or the normal posted speed limit of the roadway.~~

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

SUPPLEMENTAL SPECIFICATION

FOR

**SECTION 715
MISCELLANEOUS MATERIALS**

715.41-IMPACT ATTENUATORS:

715.41.4-Truck Mounted Attenuator (TMA) and Trailer Truck Mounted Attenuator (TTMA):

ADD THE FOLLOWING PARAPGRAH TO THE END OF THE SECTION.

Only TMA and TTMA devices designed and tested to meet MASH Test Level 3 requirements will be evaluated and considered for approval. Such devices meeting only Test Level 2 requirements will not be approved.

SECTION BREAK

NEW BUSINESS ITEMS

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

SPECIAL PROVISION

FOR

STATE PROJECT NUMBER: _____

FEDERAL PROJECT NUMBER: _____

**ELECTRONIC SUBMISSION OF PAYROLLS AND
SUBCONTRACTOR PAYMENT**

1.0-GENERAL REQUIREMENTS:

The Contractor and all subcontractors shall submit all certified payrolls and subcontractor payments, including those made to Disadvantaged Business Enterprises (DBEs), using the AASHTOWare™ Project Civil Rights and Labor (CRL) system in accordance with this provision. For subcontractor payments, the term “subcontractor” shall include all vendors subject to the Required Contract Provisions Federal-Aid Construction Contracts (FHWA-1273). All subcontracting agreements made by the Contractor shall include this Special Provision.

There will be no direct payment for recording and reporting of this information. All costs associated with this provision shall be considered incidental. More information about the CRL system can be located at: <https://www.aashtowareproject.org/index.php>.

2.0-SYSTEM REQUIREMENTS:

The CRL system is web-based. The Contractor shall ensure compatibility with the CRL system as necessary to successfully execute the work. The CRL system requires the ability to read, create, and edit spreadsheets in the .xlsx file format.

Contractors will be contacted by the Department after the project is awarded to begin the process for accessing the CRL system for them and their subcontractors. Contractors must register for payroll access and develop a method of import prior to the Pre-Construction Conference. The Department’s Civil Rights Compliance Division will provide training for entry of certified payrolls and subcontractor payments in CRL. Detailed information can be found on the Department’s Civil Rights Compliance Division webpage at: <https://transportation.wv.gov/crc/Pages/default.aspx>

Contractors shall ensure each subcontractor, including DBEs, has registered for payroll access and developed their method of import prior to commencing work. The Contractor and subcontractors will be granted access after submitting Request Access forms for each individual user who requires an account. Only those firms with a contract in the system should submit the Request Access form. The software is configured so that each firm can only see their specific

contract information. There will only be one single sign-on process for multiple application access within the Department.

The Department will provide access and a log-in identification (ID) for the CRL system to designated employees of the Contractor and approved subcontractors entered into the system for the contract. The login ID and password are unique to the designated employee and must not be shared with other employees. There are no fees associated with accessing the system or receiving a login ID.

3.0-PROCEDURES:

3.1-Certified Payroll and Subcontractor Data Submission: The Contractor and all subcontractors shall use the CRL system to provide the Department with electronic certified payrolls. The Contractor shall assume all responsibility for ensuring all payrolls and all subcontractor payrolls are submitted and certified electronically in CRL for each week in which any contract work is performed. If all payrolls are not received in this timeframe, the progress payment shall be withheld until all necessary payrolls have been received. Electronic submittal of certified payrolls can be submitted using the following methods:

- Manually add, copy, or modify data directly into CRL;
- Import payroll data with the CRL payroll spreadsheet XML converter tool available at <https://xml.cloverleaf.net/spreadsheet/>;
- Convert payroll system program data to Payroll XML and import it into the CRL system. Information on how to convert to payroll program data to an XML file can be located at <https://xml.cloverleaf.net/resourcekit/>;
- The Contractor may send, on behalf of a subcontractor, payroll payment information based on a signed, certified paper payroll through the Electronic Proxy Payroll Process. Import payroll data with the CRL payroll spreadsheet XML converter tool available at <https://xml.cloverleaf.net/spreadsheet/>.

The Department's Civil Rights Compliance Division may require at any time certified paper copies of payrolls conforming to FHWA-1273 from any or all Contractors working on the project.

3.2-Subcontractor Payment Submission Requirements: The Contractor shall post payment to subcontractors in CRL, including DBE firms listed on their DBE plan towards meeting their contract DBE goal, within fourteen (14) days after receipt of payment from the Department. The Contractor shall submit, and shall require each subcontractor to provide, payment amounts relative to all involvement on the project during the life of the contract in which participation occurs and verification is available. The Contractor shall enter all payments made to all subcontractors into the Payment area of CRL for each estimate.

Refer to the Special Provision for Subcontractor Prompt Payment for further information regarding subcontractor payments.

The Department's Civil Rights Compliance Division may require at any time proof of payments from any or all subcontractors working on the project, including any information related to Contractor DBE payments.

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

SPECIAL PROVISION

FOR

STATE PROJECT NUMBER: _____

FEDERAL PROJECT NUMBER: _____

**SECTION 406
HIGH FRICTION SURFACE TREATMENT**

406.1-DESCRIPTION:

ADD THE FOLLOWING TO THE END OF THE SUBSECTION:

Bridges to receive an High Friction Surface Treatment (HFST) overlay shall be pretreated/primed for the purpose of crack sealing and complete waterproofing.

406.2-MATERIALS:

ADD THE FOLLOWING AFTER THE FIRST SENTENCE:

Materials for the pretreatment/ priming of bridge decks must be from the same manufacturer and proven by the manufacturer of the binder to be compatible.

406.3-ACCEPTANCE TESTING:

REMOVE AND REPLACE THE FIRST SENTENCE WITH THE FOLLOWING:

The binder and aggregate shall be evaluated by AASHTO Product Evaluation and Audit Solutions. Bridge deck pretreatment/primer must have certification from the binder manufacturer that the materials are compatible. This certification shall be submitted to the Engineer a minimum of two weeks prior to starting work.

406.5-PLACING:

ADD THE FOLLOWING AFTER THE FIRST PARAGRAPH:

The manufacturer's representative must be on site for the pretreatment/primer on bridge decks. Plans will indicate locations and whether the pretreatment/primer is to be a flood coat or crack chasing method. The Contractor is responsible for the proper construction sequence and methods of applying the binder and aggregate after the application of the pretreatment/primer on bridge decks.

406.11-BASIS OF PAYMENT:

ADD THE FOLLOWING TO THE END OF THE SECOND PARAGRAPH:

Pretreatment/primer of bridge decks will be incidental to Quantity of "High Friction Surface Treatment".

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

SUPPLEMENTAL SPECIFICATION

FOR

**SECTION 715
MISCELLANEOUS MATERIALS**

715.42-TRAFFIC SIGNAL MATERIALS AND EQUIPMENT:

715.42.10 Electrical Conduit:

ADD THE FOLLOWING SUBSECTION:

715.42.10.5–PVC-coated, Galvanized Rigid Conduit: The galvanized rigid conduit shall be approved by Underwriters Laboratories, National Electrical Manufacturers Association (NEMA) RN-1, and American National Standards Institute (ANSI) C80-1. In addition to approval, the conduit shall meet the following standards:

- a. ~~The conduit shall meet the following standards:~~ ASTM D149, ASTM D1735, ASTM D2247, ASTM D2240, ASTM D1308, ASTM D638, ASTM D746, ASTM D1151, ASTM D870, ASTM G152, ASTM G153, ASTM D3359, ASTM D4585, ASTM B571
- b. Exterior finish shall have a 40 mil PVC coating.
- c. Interior finish shall have a 2 mil urethane coating.
- d. Thread finish shall have a urethane coating over hot galvanized steel.
- e. Each length of conduit shall be furnished with one liquid tight connector.

This conduit shall be used from junction box to junction box at each road crossing, unless otherwise specified in the project plans. Suitable for bore and jack installation operations.