MAPA Meeting – May 3, 2022
Recent and Upcoming Policy Changes (effective July 1, 2022 unless otherwise noted)

1. Sec 109.14 was updated to better clarify when price adjustments for fuel apply.

109.14 Price Adjustment for Fuel. If the contractor accepts the option for fuel adjustment in the bid proposal, the method of price adjustment for the fuel used on the items of work specified herein will be based on "Fuel Usage Factors" The following table specifies the fuel usage factors for Production and On-Road Hauling. The On-Road Hauling Factor is based on an average 30-mile round trip and will be used regardless of the actual haul distance. Price adjustment for fuel does not apply to fixed-cost items listed in Job Order Contracts. Price adjustment for fuel shall only apply to items that are defined in the table below and listed in the Listing of Bid Items for Highway Construction at the time of bid. Non-standard bid items shall not be subject to price adjustment for fuel unless specified elsewhere in the contract.

Item of Work	Unit	Fuel Usage Factor for Production	Fuel Usage Factor for On-Road Hauling	Total Fuel Usage Factor
Class A Excavation	gal/yd³	0.20	n/a	0.20
Unclassified Excavation	gal/yd³	0.30	n/a	0.30
Class C Excavation (Includes Sandstone and Igneous Rock Excavation)	gal/yd³	0.40	n/a	0.40
Embankment in Place	gal/yd³	0.35	n/a	0.35
Bituminous Construction on Roadways, Shoulders and Entrances. Includes both full depth asphalt and overlays. Includes all asphalt mixes under Secs 401, 402 and 403, as well as Ultrathin Bonded Asphalt Wearing Surface (UBAWS). Asphalt mixes paid by SY will be converted to equivalent tons using a factor of 1.98 tons/yd³.	gal/ton of total asphalt mix	2.65	0.67	3.32
Concrete Pavement Construction on Roadways, Shoulders and Entrances. Includes both full depth concrete and overlays. Includes roller compacted concrete. Round to nearest 1 in. increment.	gal/yd² 6 in. 7 in. 8 in. 9 in. 10 in. 11 in. 12 in. 13 in.	 0.27 0.29 0.31 0.33 0.35 0.36 0.39 0.41	 0.22 0.26 0.29 0.33 0.37 0.41 0.44 0.48	 0.49 0.55 0.60 0.66 0.72 0.77 0.83 0.89
(e.g. if 7.5" pavement use 8 in. factor). If less than 6 in., use 6 in. factor. Concrete paid by CY will be converted to equivalent thickness.	14 in.	0.42	0.52	0.94
Aggregate Base Construction[a] on Roadways, Shoulders and Entrances.	gal/yd² 3in. 4 in. 5 in. 6 in. 7 in. 8 in. 9 in. gal/ton gal/yd³	 n/a n/a n/a n/a n/a n/a n/a n/a n/a	 0.11 0.15 0.19 0.23 0.26 0.30 0.34 0.67 1.35	 0.11 0.15 0.19 0.23 0.26 0.30 0.34 0.67 1.35

[a] Includes all base in Secs 302 and 304, when hauled to the project, but does not include material in Secs 303 or 310. Does not include any base produced within project limits or adjacent to the project. Includes base shown in pay limits for optional shoulder designs (e.g. A3 shoulder), but not the portion identified as incidental base.

2. There have been substantial revisions to Sections 801, 802, 805, and 806 regarding seeding, mulch, and lime/fertilizer. This also includes a new Std. Plan and bid item changes. Due to the amount of revisions, this is being shared as an attachment. The bid item changes are shown below.

Item Number	Description of Revision
8025006	ADDED ITEM "MULCHING" 0.1 ACRE
8061017	REVISED ITEM DESCRIPTION TO REMOVE 'MULCHING'
8051000A	REVISED ITEM DESCRIPTION TO 'COOL SEASON GRASSES'
8052000A	REVISED ITEM DESCRIPTION TO 'WARM SEASON GRASSES'

3. There have been substantial revisions to Sections 903 and 1044. This also includes revisions to Std. Plan 903.03, D-29 sheet, and bid item changes. Due to the amount of revisions, this is being shared as an attachment. The bid item changes are shown below.

9031271	DELETED ITEM REVISED TO 9031271A
9031271A	ADDED ITEM 'DRIVEN POST ANCHOR FOR 2 IN. PSST – 12 GA.' 1.0 EACH
9031272	DELETED ITEM REVISED TO 9031272A
9031272A	ADDED ITEM '2.25 IN PSST POST INSERT (6 FT.) – 12 GA.' 1.0 EACH
9031273	DELETED ITEM REVISED TO 9031273A
9031273A	ADDED ITEM 'DRIVEN POST ANCHOR FOR 2 IN. PSST – 7 GA.' 1.0 EACH
9031278	DELETED ITEM
9031274	ADDED ITEM ' CONCRETE POST ANCHOR FOR 2 IN. PSST – 7 GA.' 1.0 EACH
9031279	DELETED ITEM
9031281	DELETED ITEM REVISED TO 9031281A
9031281A	ADDED ITEM 'DRIVEN POST ANCHOR FOR 2.5 IN. PSST – 7 GA.' 1.0 EACH
9031282	DELETED ITEM
9031285	ADDED ITEM 'CONCRETE POST ANCHOR FOR 2.5 IN. PSST – 7 GA.' 1.0 EACH

4. Section 304.4.3 is a new section to establish small quantities for aggregate base course as well as QC/QA expectation.

304.4.3 Small Quantities. Small quantities are less than 50 ton, and will apply to individual projects, individual projects in combination contracts or projects with short discontinuous sections. The following acceptance procedures shall be used:

(a) QC/QA tests for gradation, deleterious material, plasticity index, density and DCP index will not be required.
(b) Each lift will be compacted by a minimum of three complete coverages with a 5-ton roller until there is no visible evidence of further consolidation.
(c) Acceptance will be based on visual inspection of each compacted lift by the engineer.

In lieu of this section, the contractor has the option of electing in the QC Plan to use all testing frequencies in accordance with Sec 304.4.1 for each separate aggregate base course type qualifying as a small quantity.

5. Section 616, 617, 1063, and 1064 have been updated to establish sunset dates for temporary traffic control devices. This also sets the requirement of two-loop temporary concrete barriers shall not be used after January 2023.

612.3 Safety Requirements. All impact attenuators shall be manufactured specifically for traffic control purposes and shall be in accordance with the MUTCD and any applicable safety and design codes. Non MASH 2016 impact attenuators manufactured prior to January 1, 2023 may be used until January 1, 2030. All impact attenuators manufactured after January 1, 2023 shall meet MASH 2016 Test Level 3 crash test requirements. The contractor shall submit the manufacturer's certification that units supplied comply with crash test requirements of NCHRP 350, Test Level 3 or MASH 2016 Test Level 3. ~~and have received FHWA acceptance.~~

616.3.2 The contractor shall ~~furnish~~ submit a manufacturer's certification of crashworthiness, per NCHRP 350 ~~or AASHTO Manual for Assessing Safety Hardware (~~MASH~~)~~ 2016 Evaluation Criteria, for FHWA Category 1 temporary traffic control devices and appurtenances. The contractor shall ~~furnish~~ submit the manufacturer's certification of crashworthiness per NCHRP 350 or MASH 2016 Test Level 3 criteria for all FHWA Category 2 and Category 3 temporary traffic control devices and appurtenances. ~~the FHWA acceptance letter for FHWA Category 2 and Category 3 traffic control devices and appurtenances. The FHWA acceptance letter shall indicate that the device and appurtenance complies with the crash test requirements of NCHRP 350 or (MASH), Test Level 3 (TL-3).~~ Non MASH 2016 Category 2 temporary traffic control devices and appurtenances manufactured prior to January 1, 2023 may be used until January 1, 2026. Non MASH 2016 Category 3 temporary traffic control devices manufactured prior to January 1, 2023 may be used until January 1, 2030. All Category 2 and Category 3 temporary traffic control devices and appurtenances manufactured after January 1, 2023 shall meet MASH 2016 Test Level 3 crash test requirements. The contractor shall submit a manufacturer's certification of crashworthiness per NCHRP 350 or MASH 2016 for FHWA Category 4 temporary traffic control devices when available. Regardless whether the device meets NCHRP 350 or ~~(~~MASH~~)~~ 2016 criteria, the engineer reserves the right of final approval. Installation of a device prior to the engineer's approval will be at the contractor's risk.

617.20.1 Description. This work shall consist of furnishing, installing, relocating and removing temporary traffic barrier as shown on the plans or as directed by the engineer. For purposes of this specification, temporary concrete traffic barrier will be defined as Type F three-loop concrete traffic barrier or approved alternate barrier system that meets ~~MASH or~~ NCHRP 350 or MASH 2016 criteria. ~~and has FHWA acceptance.~~

617.20.2.2 Use of t~~T~~wo-loop ~~or three loop~~ temporary Type F concrete traffic shall not be allowed after January 1, 2023. ~~barrier may be used at the option of the contractor.~~

~~**617.20.2.2.1** For two-loop style temporary traffic barrier, as well as two-loop and three-loop styles used in combination, the bottom washer, retainer bolt and nut will be required. Visual cracks in the loop steel will be cause for rejection of the barrier unit by the engineer.~~

~~**617.20.2.2.2** Existing two-loop concrete barrier owned by contractors or previously accepted two-loop concrete barrier in a manufacturer's stockpile (inventory) will be allowed for use on MoDOT projects if:~~

~~(a) The barrier was fabricated prior to January 1, 2004.~~

~~(b) Either the MoDOT acceptance stamp is legible on the barrier or certification is provided by the contractor stating that the barrier was fabricated prior to January 1, 2004, and in accordance with MoDOT specifications.~~

~~(c) The barrier is in acceptable condition.~~

617.20.2.3 Other types of temporary traffic barrier will be allowed if the barrier has been approved in accordance with Sec 1064 and meets the project specific need as approved by the engineer.

617.20.3 Certification. Prior to use ~~The~~ the contractor shall submit ~~provide~~ to the engineer a ~~barrier~~ manufacturer's certification of crashworthiness per NCHRP 350 or MASH 2016 for portable concrete barrier or other approved temporary barrier. Non MASH 2016 temporary barriers manufactured prior to January 1, 2023 may be used until January 1, 2030. All temporary barriers manufactured after January 1, 2023 shall meet MASH 2016 crash test requirements ~~that the barrier furnished is in accordance with the contract documents prior to use.~~

1063.2 General Requirements. All temporary traffic control devices shall be manufactured as shown on the plans and as specified, in accordance with MUTCD requirements and shall be NCHRP 350 or MASH 2016 compliant. FHWA Category 1 temporary traffic control devices are not required to be crash tested unless modified. Non MASH 2016 FHWA Category 2 temporary traffic control devices manufactured prior to January 1, 2023 may be used until January 1, 2026. Non MASH 2016 FHWA Category 3 temporary traffic control devices manufactured prior to January 1, 2023 may be used until January 1, 2030. All FHWA Category 2 and Category 3 temporary traffic control devices manufactured after January 1, 2023 shall meet MASH 2016 Test Level 3 crash test requirements. MASH 2016 FHWA Category 4 temporary traffic control devices should be used when available. Nominal dimensions will be permitted for dimensional lumber where applicable. All temporary traffic control devices shall exhibit good workmanship and shall be free of objectionable marks or defects that affect appearance or serviceability. The brand name or model number shall be permanently identified on each traffic control device.

1063.11 Truck or Trailer Mounted Attenuators. ~~Each Truck or Trailer Mounted Attenuator (TMA) shall be in accordance with Test Level 3 criteria as set forth in NCHRP 350 or MASH.~~ Each TMA shall have a standard trailer lighting system, including brake lights, taillights, turn signal lights and Federal Motor Carrier Safety Administration identification bar lights. In the operating position, the rear facing of the TMA shall be marked with alternating 8-inch yellow and 8-inch black retroreflective sheeting forming an inverted "V" at the center and slope downward at an angle of 45 degrees toward each side of the unit or a checkered board pattern consisting of 12-inch square red and 12-inch square white retroreflective sheeting. The TMA may be marked with the same operating pattern or red and white DOT conspicuity tape to simulate the looks of a standard van body trailer when traveling. The TMA shall have the same standard trailer lighting system noted above when the unit is in the transport position.

1064.2.1.2 Two-Loop Concrete Barrier. The use of two-loop Type F temporary concrete barrier shall be discontinued January 1, 2023. ~~District material personnel when notified to re-stamp previously accepted barrier will be responsible for re-stamping the barrier if the previous acceptance stamp is legible and if the barrier is not damaged to the extent that it is felt that the barrier cannot perform properly. Reasons for rejection will be, but not limited to:~~

~~(a) Exposed steel reinforcement.~~

~~(b) Damage or cracks in the connecting loops.~~

~~(c) Missing chunks of concrete.~~

~~(d) Excessive marring or scarring.~~

~~(e) Extensive scaling of the concrete.~~

~~(f) Misalignment of the connecting loops that would hinder insertion of the keeper pin.~~

6. Section 403.19.2 has been updated to clarify sublots.

403.19.2 Lots. The lot size shall be designated in the contractor's QC Plan. Each lot shall contain no less than four sublots and no more than 28 sublots. The~~with a~~ maximum sublot size shall be~~of~~ 1,000 tons. Sublots from incomplete lots shall be combined with the previous complete lot for determination of pay factors. When no previous lot exists, the mixture shall be treated in accordance with Sec 403.23.7.4.1. A new lot shall begin when the asphalt content of a mixture is adjusted in accordance with Sec 403.11.