

Job No.: JKU0405

Route: Various

County: Various

JOB SPECIAL PROVISIONS TABLE OF CONTENTS (ROADWAY)


(Job Special Provisions shall prevail over General Special Provisions whenever in conflict therewith.)

A.	General - Federal JSP-09-02J	1
B.	Project Contact for Bidder / Contractor Questions	1
C.	Scope of Work	2
D.	Job Order Contract	3
E.	Procedures for Developing a Job Order	4
F.	Term of Contract	6
G.	Fixed Unit Price List	6
H.	Traffic Control Plan Types	8
I.	Adjustment Factors	11
J.	Bidding the Adjustment Factors	12
K.	Contract Award	12
L.	Bonds	12
M.	Notice to Proceed	12
N.	Contract Time for Completion of Job Order	13
O.	Completing the Work	13
P.	Final Inspection and Acceptance of the Work	14
Q.	Liquidated Damages for Failure or Delay in Starting or Completing Work on Time	14
R.	Contract Payments	14
S.	Mobilization	15
T.	Working Hours	15
U.	Work Zone Traffic Management	15
V.	Truck Mounted Attenuator (TMA)	18
W.	Emergency Provisions and Incident Management	19
X.	Delay Provisions	19
Y.	Sample Job Orders	20
Z.	Utilities	32
AA.	Work Plan and Schedule for Accomplishing Work	32
BB.	Supplemental Revisions JSP-18-01AA	33
CC.	Railroad Requirements	42
DD.	Sign Removal Pay Item Details	42
EE.	Sign Installation Pay Item Details (Contractor Furnished Materials)	43
FF.	Sign Installation Pay Item Details (Commission Furnished Materials)	47
GG.	Environmental Review Requirement	48

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 <p>02/01/2024 7:51:43 AM KARLEE A. COVINGTON - CIVIL MO-PE-2020000009</p>	<b>MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION</b> 105 W. CAPITOL AVE. JEFFERSON CITY, MO 65102 Phone 1-888-275-6636
	If a seal is present on this sheet, JSP's have been electronically sealed and dated.
	JOB NUMBER: JKU0405 VARIOUS COUNTIES DATE PREPARED: 1/17/24
	ADDENDUM DATE:

Only the following items of the Job Special Provisions (Roadway) are  
authenticated by this seal: All

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JOB  
SPECIAL PROVISION

A. General - Federal JSP-09-02J

**1.0 Description.** The Federal Government is participating in the cost of construction of this project. All applicable Federal laws, and the regulations made pursuant to such laws, shall be observed by the contractor, and the work will be subject to the inspection of the appropriate Federal Agency in the same manner as provided in Sec 105.10 of the Missouri Standard Specifications for Highway Construction with all revisions applicable to this bid and contract.

**1.1** This contract requires payment of the prevailing hourly rate of wages for each craft or type of work required to execute the contract as determined by the Missouri Department of Labor and Industrial Relations and requires adherence to a schedule of minimum wages as determined by the United States Department of Labor. For work performed anywhere on this project, the contractor and the contractor's subcontractors shall pay the higher of these two applicable wage rates. State Wage Rates, Information on the Required Federal Aid Provisions, and the current Federal Wage Rates are available on the Missouri Department of Transportation web page at [www.modot.org](http://www.modot.org) under "Doing Business with MoDOT", "Contractor Resources". Effective Wage Rates will be posted 10 days prior to the applicable bid opening. These supplemental bidding documents have important legal consequences. It shall be conclusively presumed that they are in the bidder's possession, and they have been reviewed and used by the bidder in the preparation of any bid submitted on this project.

**1.2** The following documents are available on the Missouri Department of Transportation web page at [www.modot.org](http://www.modot.org) under "Doing Business with MoDOT"; "Standards and Specifications". The effective version shall be determined by the letting date of the project.

General Provisions & Supplemental Specifications

Supplemental Plans to July 2023 Missouri Standard Plans  
For Highway Construction

These supplemental bidding documents contain all current revisions to the published versions and have important legal consequences. It shall be conclusively presumed that they are in the bidder's possession, and they have been reviewed and used by the bidder in the preparation of any bid submitted on this project.

B. Project Contact for Bidder / Contractor Questions

**1.0** Any project specific questions shall be directed to the to the following contact:

Karlee Covington, P.E. – Project Contact Kansas City District  
600 NE Colbern Rd Lee's Summit, MO 64086  
Telephone Number: 816-607-2217  
Email: [Karlee.Covington@modot.mo.gov](mailto:Karlee.Covington@modot.mo.gov)

Job No.: JKU0405

Route: Various

County: Various

**2.0** Upon award and execution of the contract, the successful bidder/contractor shall forward all questions and coordinate the work with the contract administrator. The contract will be administered and inspected by the engineer/contract administrator listed below:

Steve Sandifer  
Resident Engineer  
99400 E 43<sup>rd</sup> St. Kansas City, mo 64133  
(816) 353-8353

**3.0** All questions concerning the bid document preparation can be directed to the Central Office – Design at (573) 751-2876.

C. Scope of Work

**1.0** The scope of work for this project is the removal and/or installation of highway signs and related items in the Kansas City District. The contractor will be required to provide the necessary traffic control to complete the work. The contractor will be notified of the need for work by written notice on a location-by-location basis.

**2.0** The work may be performed along any Commission maintained roadways in the following geographic areas:

Platte County
Clay County
Cass County
Jackson County

**3.0 Removals.** The contract includes pay items for the removal and disposal of existing highway signing items. Work orders may include the removal of signs, sign posts, footings, post anchors, breakaway assemblies, and any other related hardware. See Section EE Signing Removal Pay Item Details for a description of the fixed unit price items.

**4.0 Installation of Contractor Furnished Materials.** The contract includes pay items for the installation of contractor furnished signs, posts, anchors, breakaway assemblies, and footings. The contractor shall provide and install all materials in accordance with the current version of the Missouri Standard Specifications for Highway Construction, the Missouri Standard Plans for Highway Construction, and the job specifications. See Section FF Signing Installation Pay Item Details (Contractor Furnished Materials) for a description of the fixed unit price items.

**5.0 Installation of Commission Furnished Materials.** The contract includes pay items for the installation of commission furnished signs and posts. If materials are supplied by the commission for the work order, the contractor will be required to pick up the materials from the MoDOT Barrett Station Sign Shop. The contractor will be required to provide all necessary nuts, bolts, fasteners, and any other hardware required to install the signs, posts, and anchors (commission will not furnish these items). See Section GG Signing Installation Pay Item Details (Commission Furnished Materials) for a description of the fixed unit price items.

**6.0 Contractor Furnished Traffic Control.** The contract includes pay items for contractor furnished traffic control. Different traffic control plan types and set ups will be required to complete the work. The contractor will be required to provide all necessary devices and labor to complete the work. See Section H Traffic Control Pay Items Details for a description of the fixed unit price items.

**7.0** Work Orders may include a combination of contractor furnished and commission furnished materials. The Engineer reserves the right to have others perform some or all of the work at individual locations based on the needs of the Commission.

**8.0** All work will be completed during daytime hours. The approved work hours may vary depending on the work location.

D. Job Order Contract

**1.0** A Job Order Contract is an indefinite quantity contract pursuant to which the contractor shall perform the work itemized in a Job Order at individual work locations throughout the project limits. The contractor shall perform all tasks itemized in the Job Order.

**2.0** The engineer may identify the required work at an individual work location in collaboration with the contractor at a Joint Scope Meeting, unless the engineer approves other arrangements. The engineer will provide the contractor with a draft Detailed Scope of Work which the contractor shall review. Once the detailed Scope of Work is agreed upon, the engineer will issue a Job Order to the contractor. At any given time the contractor may be performing more than one Job Order.

**3.0** The contract includes a list of fixed cost pay items with fixed unit prices. Payment for the work will be determined by multiplying the fixed unit prices by the Adjustment Factor. The contractor shall bid the Adjustment Factor to be applied to the fixed unit prices for the work. The total cost of an individual Job Order will be determined by multiplying the fixed unit price of each fixed cost pay item by the appropriate quantity and then multiplying the total cost of all pay items by the Adjustment Factor.

**4.0 Definitions.**

**4.1. Detailed Scope of Work.** A written document that sets forth the work the contractor is obligated to perform in connection with a particular Job Order.

**Job Order.** A written order from the engineer to the contractor directing the work required at an individual work location in accordance with the Detailed Scope of Work within the Job Order Completion Time.

**4.2 Job Order Completion Time.** The time within which the contractor must complete the Detailed Scope of Work for a particular Job Order.

**4.3 Fixed Cost Pay Item.** Work for which a description and fixed cost is set forth in the fixed cost pay item list.

**4.4 Non-Fixed Cost Pay Item.** Work for which a description and fixed cost is not set forth in the pay item list. Payment for non-fixed cost pay items will be determined in accordance with Sec 109.4.2, 109.4.3, or 109.4.4. Non-fixed cost pay items will be paid using an Adjustment Factor of 1.000.

E. Procedures for Developing a Job Order

**1.0 Initiation of a Job Order.** The engineer will notify the contractor of a potential Job Order by issuing a Notice of Joint Scope Meeting. The notification will be issued by electronic mailing unless the engineer approves other arrangements. The contractor shall confirm receipt of all job orders by the same means as issued.

**1.1** The contractor shall attend the Joint Scope Meeting and be prepared to discuss, at a minimum:

- a) The general scope of the work;
- b) Existing conditions, presence of waterways, wetlands, or other natural resources,
- c) Presence of hazardous materials
- d) Methods and alternative for accomplishing the work;
- e) Access to the site;
- f) Staging area availability/location;
- g) Requirements for catalog cuts, technical data, samples and shop drawings;
- h) Requirements for professional services, including sketches, drawings, and specifications;
- i) Hours of operation;
- j) Anticipated working days and schedule;
- k) Liquidated damages;
- l) Specific quality requirements for equipment and material;
- m) List of anticipated Subcontractors and Material Suppliers.

**1.2** Upon completion of the joint scoping process, the engineer will prepare a draft detailed Scope of Work referencing any sketches, drawings, photographs, and specifications required to document accurately the work to be accomplished. The contractor shall review the proposed detailed Scope of Work and request any desired changes or modifications thereto. When an acceptable detailed Scope of Work has been completed, the engineer will issue a Draft Job Order.

**1.3** The contractor does not have the right to refuse to perform any Job Order or any work identified in a Job Order. If the contractor refuses to perform any Job Order or any work identified in a Job Order, the contractor may be considered to be in default in accordance with Sec 108.

**2.0 Preparation Of The Job Order.** The engineer will prepare a Draft Job Order and submit the order to the contractor for final review. The contractor and the engineer will jointly review the Draft Job Order and finalize the order. Establishment of pricing for any non-fixed cost pay items shall be in accordance with Sec 109.4.2 or 109.4.3. If no agreement to pricing can be made then the work will proceed with payment for non-fixed cost items under Sec 109.4.4.

**2.1** When the engineer and contractor have agreed to the scope of work and Fixed Cost and Non-Fixed Cost tasks to be performed, the engineer will finalize the official Job Order and submit a signed Job Order for the contractor to review and sign. The affixed signatures by the engineer and the contractor shall bind the Job Order. If the contractor is not clear or in disagreement with the terms of the Job Order the contractor shall NOT sign the Job Order, but shall work with the engineer to clear up any discrepancies in the work to be done. If the contractor fails to execute the Job Order, the contractor may be considered to be in default in accordance with Sec 108.

**3.0** The Commission reserves the right to cancel or reject a Job Order for any reason. The Commission also reserves the right not to issue a Job Order if that is determined to be in the best interests of the

Commission. The contractor shall not recover costs arising out of or related to the development of the Job Order including but not limited to the costs to attend the Joint Scope Meeting, review the Detailed Scope of Work, subcontractor costs, and the cost to review the Job Order Proposal with the Commission.

**4.0 Job Order Issuance.** The Job Order will be signed by the engineer and delivered to the contractor. The Job Order will reference the Detailed Scope of Work and set forth the amount to be paid and the time to complete the work.

**5.0 Notice to Proceed.** Each Job Order will include a notice to proceed, which will stipulate the date the contractor is expected to begin work. The notice to proceed date will normally be within 14 calendar days after the job order is issued.

**6.0 Job Orders.** A job order is a written notice from the engineer to the contractor directing the work to be performed in a section of the roadway at one or more locations. A job order will be limited to a 2-mile section of roadway, and the job order will include all of the work in that section. For divided highways, a job order shall be defined as a 2-mile section in one direction (work in both directions of a 2-mile section of divided highway will constitute 2 job orders). A job order is considered a contract document as defined in Sec 101.2.

**6.1 Job Order Information.** The job order will provide the following information:

- a) Job order number and MoDOT Property Damage (PD) number (if applicable)
- b) County, route, and location
- c) Date and time of issuance
- d) Notice to proceed date and time
- e) Required completion date
- f) Designation of nighttime work (if needed)
- g) Traffic control plan type
- h) Additional traffic control devices (if needed)
- i) Speed limit reduction and normal speed limit (if needed)
- j) General description of repair
- k) Estimated repair quantities
- l) Name and signature of the engineer

**6.2 Multiple Job Orders.** The engineer may issue multiple job orders with the same or overlapping completion periods.

**6.3 Completed Job Orders.** The contractor shall provide the following information on the contractor's copy of the completed job order:

- a) Actual date and time that repairs are completed
- b) Actual repair materials used to complete the work
- c) Signature of the contractor's authorized representative certifying that the work is complete
- d) Missouri One Call (800 Dig Rite) "all clear" reference number indicating the contractor's notification of the Missouri One Call utility locate system
- e) MoDOT Signal & Lighting Locates "all clear" reference number indicating the contractor's notification of MoDOT's utility locate system

**6.4** One copy of all completed job orders shall be returned to the engineer with the contractor's monthly request for payment unless otherwise directed by the engineer.

**F. Term of Contract**

**1.0** The term of this contract shall be for the period commencing July 1, 2024 and ending June 30, 2025.

**2.0** Any work already ordered or in progress when the contract term ends shall be completed in accordance with the provisions, price proposals and timelines established in the issued Job Order(s), or liquidated damages will be assessed against the contractor in accordance with the provisions of this contract.

**G. Fixed Unit Price List**

**1.0 Description.** A fixed unit price list containing unit prices associated with Sign Installation is listed below. Fixed unit prices are for complete and in-place construction and include all labor, equipment and material required to complete the construction task. All labor, material, equipment, and work required by a specification shall be considered part of the fixed unit price, unless otherwise stated elsewhere in this contract. Pay limits will be defined in the approved Job Order.

**2.0 Fixed Unit Price List for Sign Repair Job Orders.**

<b>CONTRACTOR FURNISHED TRAFFIC CONTROL</b>			
<b>Item Number</b>	<b>Description</b>	<b>Unit</b>	<b>Fixed Unit Price</b>
6169902	MISC. SHOULDER WORK AND WORK BEYOND THE SHOULDER	LS	\$250.00
6169902	MISC. 1-LANE 2-WAY OPERATION W/ FLAGGERS	LS	\$1500.00
6169902	MISC. SINGLE LANE CLOSURE	LS	\$750.00
6169902	MISC. PARTIAL RAMP CLOSURE	LS	\$350.00
6169902	MISC. COMPLETE RAMP CLOSURE	LS	\$750.00
6169902	MISC. ENTRANCE RAMP AREA WORK	LS	\$750.00
6169902	MISC. EXIT RAMP AREA WORK	LS	\$750.00
6169902	MISC. ADDITIONAL TRUCK MOUNTED ATTENUATOR	EA	\$250.00
6169902	MISC. ADDITIONAL FLASHING ARROW PANEL	EA	\$100.00
6169902	MISC. ADDITIONAL DIRECTIONAL INDICATOR BARRICADE	EA	\$10.00
6169902	MISC. ADDITIONAL CHANNELIZER (TRIMLINE/DRUM)	EA	\$2.00
6169902	MISC. ADDITIONAL CHANGEABLE MESSAGE SIGN	EA	\$500.00
6169904	MISC. ADDITIONAL TRAFFIC CONTROL SIGNS	SQFT	\$4.00



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Route: Various

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<b>SIGN REMOVAL ITEMS</b>			
<b>Item Number</b>	<b>Description</b>	<b>Unit</b>	<b>Fixed Unit Price</b>
9039901	Misc. Sign Removal (from PSST, Round Pipe, U-Channel, or Wood Post)	EA	\$50.00
9039901	Misc. Sign Post Removal (PSST, Round Pipe, U-Channel or Wood Post)	EA	\$75.00
9039901	Misc. Sign Anchor or Stub Removal (PSST or U-Channel Post)	EA	\$50.00
9039901	Misc. Concrete Sign Footing Removal (PSST, Round Pipe, U-Channel, or Wood Post)	EA	\$250.00
<b>SIGN INSTALLATION ITEMS (CONTRACTOR FURNISHED)</b>			
<b>Item Number</b>	<b>Description</b>	<b>Unit</b>	<b>Fixed Unit Price</b>
9039901	MISC. CONCRETE FOOTINGS EMBEDDED (PSST OR ROUND PIPE POST)	EA	\$350.00
9039901	MISC. FURNISHING AND INSTALLING BREAK AWAY ASSEMBLY (ROUND PIPE POST)	EA	\$75.00
9039901	MISC. FURNISHING AND INSTALLING BREAK AWAY ASSEMBLY (PSST POST)	EA	\$75.00
9039901	MISC. FURNISHING AND INSTALLING DRIVEN ANCHOR (PSST POST) – 7 GA	EA	\$50.00
9039901	MISC. FURNISHING AND INSTALLING CONCRETE POST ANCHOR (PSST POST) – 7 GA	EA	\$50.00
9039901	MISC. FURNISHING AND INSTALLING BARRIER WALL ANCHOR (PSST POST)	EA	\$75.00
9039903	MISC. FURNISHING AND INSTALLING 2 IN. PSST POST – 12 GA	LF	\$10.00
9039901	MISC. FURNISHING AND INSALLING 2.25 IN. PSST POST INSERT (6 FEET) – 12 GA	EA	\$50.00
9039903	MISC. FURNISHING AND INSTALLING 2.5 IN PSST POST – 12 GA	LF	\$12.00
9039911	MISC. FURNISHING AND INSTALLING ROUND PIPE POST –	LB	\$7.00
9039905	MISC. FURNISHING AND INSTALLING NEW FLAT SHEET SIGN	SQFT	\$6.00
9039905	MISC. FURNISHING AND INSTALLING NEW FLOURESCENT FLAT SHEET SIGN	SQFT	\$8.00
<b>SIGN INSTALLATION ITEMS (COMMISSION FURNISHED)</b>			
<b>Item Number</b>	<b>Description</b>	<b>Unit</b>	<b>Fixed Unit Price</b>
9039901	MISC. INSTALLATION OF COMMISSION FURNISHED SHEET METAL SIGN	EA	\$150.00
9039901	MISC. INSTALLATION OF COMMISSION FURNISHED POST TO EXISTING FOOTING OR BREAKAWAY ASSEMBLY (PSST OR ROUND PIPE POST)	EA	\$150.00
9039901	MISC. JOB ORDER MATERIAL PICK UP	EA	\$250.00
<b>MOBILIZATION</b>			
<b>Item Number</b>	<b>Description</b>	<b>Unit</b>	<b>Fixed Unit Price</b>
6191000	MOBILZATION	EA	\$750.00

## H. Traffic Control Plan Types

**1.0 Description.** The following traffic control plan types shall be used for the job orders issued for this contract. Refer to the Traffic Control Plan sheets for traffic control set up details. The fixed unit prices for each plan type include the traffic control items listed in section 2. Note: Not all of the signing/devices listed may be required for each set up. Any additional traffic control signing or devices required for a traffic control plan type than what is listed in the plan types will be paid for by the line items for additional TC devices. Uncovering and covering any conflicting signs or detour trailblazing placards furnished and installed by others is included in the work.

### 2.0 Plan Types.

**2.1 Misc. Shoulder Work and Work Beyond the Shoulder.** Work on, or beyond the shoulder shall be performed by furnishing, installing, and removing traffic control devices as detailed in the traffic control plans for: WORK BEYOND THE SHOULDER- UNDIVIDED OR DIVIDED ROADWAYS; SHOULDER WORK – UNDIVIDED ROADWAYS; RIGHT SHOULDER WORK – HIGH SPEED DIVIDED ROADWAYS; RIGHT SHOULDER WORK MULTI-LANE FREEWAYS WITH MEDIAN BARRIER; LEFT SHOULDER WORK – HIGH SPEED DIVIDED ROADWAYS. The list of traffic control devices included in this pay item are listed below (Note: all of the items listed below may not be required depending on the Traffic Control plan being used). No deduction in unit price will be made for Traffic control plans for work that do not require all of the items listed below. Any additional traffic control devices required to complete the work beyond what is listed below will be in paid in accordance with section 6.2 of this JSP.

3 each	Road Work Ahead
3 each	Shoulder Work Ahead
50 each	Channelizer (Trim Line)
1 each	Truck Mounted Attenuator with Flashing Arrow Panel

**2.2 Misc. Single Lane Closure.** A single lane closure shall be performed by furnishing, installing, and removing the following set of traffic control devices. Any additional traffic control devices required to complete the work beyond what is listed below will be in paid in accordance with section 6.2 of this JSP.

2 each	Road Work Ahead
2 each	Right/Left Lane Closed Ahead
1 each	Right/Left Lane Closed
1 each	Merge with Right /Left Arrow
14 each	Directional Indicator Barricade
50 each	Channelizer (Trim Line)
1 each	Flashing Arrow Panel
1 each	Truck Mounted Attenuator

**2.3 Misc. Partial Ramp Closure.** The contractor shall obtain approval from the engineer a minimum of five days prior to any partial ramp closure. A partial ramp closure shall be performed by furnishing, installing, and removing the set of traffic control devices listed below. Any additional Traffic Control Devices Required will be paid per section 6.2 of this JSP.

1 each	Ramp Work Ahead
1 each	Ramp Narrows

1 each	XX MPH
50 each	Channelizer (Trim Line)
1 each	Truck Mounted Attenuator

**2.4 Misc. Entrance Ramp Area Work.** Work in the Entrance Ramp Areas shall be performed by furnishing, installing, and removing traffic control devices as detailed in the traffic control plans for: ENTRANCE RAMP AREA MAINLINE WORK; ENTRANCE RAMP AREA ACCELERATION LANE WORK. The list of traffic control devices included in this pay item are listed below (Note: all of the items listed below may not be required depending on the Traffic Control plan being used). No deduction in unit price will be made for Traffic control plans that do not require all the items listed below. Any additional traffic control devices required to complete the work beyond what is listed below will be in paid in accordance with section 6.2 of this JSP.

3 each	Road/Ramp Work Ahead
2 each	Right/Left Lane Closed Ahead
1 each	Right/Left Lane Closed
1 each	Merge with Right/Left Arrow
1 each	Ramp Narrows
1 each	Yield Ahead
1 each	Yield
1 each	Merge Left/Right (W04-1L/R)
14 each	Directional Indicator Barricade
50 each	Channelizer (Trim Line)
1 each	Flashing Arrow Panel
1 each	Truck Mounted Attenuator

**2.5 Misc. Exit Ramp Area Work.** Work in the Exit Ramp Areas shall be performed by furnishing, installing, and removing traffic control devices as detailed in the traffic control plans for: EXIT RAMP AREA MAINLINE WORK; EXIT RAMP AREA DECELERATION LANE WORK. The list of traffic control devices included in this pay item are listed below (Note: all of the items listed below may not be required depending on the Traffic Control plan being used). No deduction in unit price will be made for Traffic control plans that do not require all the items listed below. Any additional traffic control devices required to complete the work beyond what is listed below will be in paid in accordance with section 6.2 of this JSP.

2 each	Road Work Ahead
2 each	Right/Left Lane Closed Ahead
1 each	Right/Left Lane Closed
1 each	Merge with Right/Left Arrow
1 each	Ramp Narrows
1 each	Exit
14 each	Directional Indicator Barricade
50 each	Channelizer (Trim Line)
1 each	Flashing Arrow Panel
1 each	Truck Mounted Attenuator

**2.6 Misc. Complete Ramp Closure.** The contractor shall obtain approval from the engineer a minimum of five days prior to any ramp closure. A ramp closure shall be performed by furnishing, installing, and removing the set of traffic control devices as detailed in the traffic control plans for: RAMP CLOSURE. The list of traffic control devices included in this pay item listed below (Note: all of the items listed below may not be required depending on the Traffic Control plan being used). No deduction in unit price will be made for Traffic control plans that do not require all of the items listed below. Any additional traffic control devices required to complete the work beyond what is listed below will be in paid in accordance with section 6.2 of this JSP.

2 each	Ramp Work Ahead
2 each	Ramp Closed Ahead
2 each	Right Lane/Ramp Closed
1 each	Merge Arrow
1 each	Road Closed
14 each	Directional Indicator Barricade
50 each	Channelizer (Trim Line)
1 each	Flashing Arrow Panel
1 each	Truck Mounted Attenuator
3 each	Type III Movable Barricade

**2.7 One-Lane Two-Way Operation with Flaggers.** A minimum of two flaggers will be required to direct traffic. Additional flaggers may be required when working at intersecting streets or ramps as directed by the engineer. No direct payment will be made for flaggers. "One-Lane Two-Way Operation with Flaggers" shall include furnishing, installing, and removing the traffic control devices listed below. Any additional traffic control devices required will be paid in accordance with section 6.2 of this JSP.

2 each	Road Work Ahead
2 each	One Lane Road Ahead
2 each	Flagger (symbol) with Flags
50 each	Channelizer (Trim Line)

**3.0 Additional Traffic Control Devices.** The engineer may determine that signs, channelizers, and Type III Movable Barricades in addition to those devices shown in the plans are necessary to safely accommodate traffic. These additional devices may be needed for merging ramp traffic, detours, multiple bridges, or other special cases to supplement the specified lane closure devices. The contract provides a fixed cost for any additional traffic control items.

**4.0 Flaggers.** Flaggers may be required when working at intersecting streets or ramps as directed by the engineer. No direct payment will be made for flaggers.

## **5.0 Method of Measurement and Basis of Payment.**

**5.1** Measurement of traffic control will be made for the traffic control required for each job order. If the work within a Job Order is confined to a continuous one-mile segment or less, a lump sum payment will be made for each traffic control plan type used in the Job Order regardless of the number of times each traffic control plan type is used.

**5.2** Payment will not be made for any lane closure that does not result in productive repair work, as determined by the engineer. Additional lane closures may be installed by the contractor at the contractor's expense. Ramp Closures will be paid for each ramp that is closed. The accepted quantity of each lane closure will be paid for at the fixed unit price for:

Item 616-99.02	Single Lane Closure	Each
Item 616-99.02	Double Lane Closure	Each
Item 616-99.02	Interior Lane Closure	Each
Item 616-99.02	Triple Lane Closure	Each
Item 616-99.02	Ramp Closure	Each
Item 616-99.02	Temporary Traffic Control Single Lane Shift	Each
Item 616-99.02	One-Lane Two-Way Operation with Flaggers	Each

multiplied by the Normal Adjustment Factor, as mutually agreed upon in the Job Order.

**5.3** Measurement of additional traffic control devices will be made per Job Order. Payment for the devices shall include furnishing, installing, and removing the additional devices at a specific work site. No payment will be made for additional devices used by the contractor without prior approval of the engineer. The accepted quantity of additional traffic control devices will be paid for in accordance with the fixed unit price list, multiplied by the Normal Adjustment Factor, as mutually agreed upon in the Job Order.

#### I. Adjustment Factors

**1.0 Description.** Adjustment Factors include business and construction related costs as defined in this specification. It is the responsibility of the contractor to verify the unit prices provided in this contract and to modify their Adjustment Factors accordingly.

**1.1 Business Costs.** Business related costs consist of profit, overhead costs, subcontractor profit and overhead, taxes, finance costs, and other costs including but not limited to;

- (a) insurance, bonds, and indemnification
- (b) project meetings, training, management, and supervision
- (c) project office staff and equipment
- (d) employee or subcontractor wage rates that exceed prevailing wages
- (e) fringe benefits, payroll taxes, worker's compensation, insurance costs and any other payment mandated by law in connection with labor that exceeds the labor rate allowances
- (f) Business risks such as the risk of low than expected volumes of work, smaller than anticipated Job Orders, poor subcontractor performance, and inflation or material cost fluctuations

**1.2 Construction Costs.** Construction related costs include but are not limited to:

- (a) personnel safety equipment
- (b) security requirements
- (c) excess material waste
- (d) daily and final clean-up
- (e) costs resulting from inadequate supply of materials, fuel, electricity, or skilled labor
- (f) costs resulting from productivity loss
- (g) working in extreme and adverse weather conditions
- (h) any other discreet items of work required to complete a particular Job Order

**1.3 General Costs.** The above lists are not exhaustive and are intended to provide general examples of cost items to be included in the contractor's Adjustment Factors as defined in the contract.

**2.0 Normal Work Adjustment Factor.** The Adjustment Factor for *Normal Working Hours* includes work conducted from 6:00 a.m. to 7:30 p.m. Monday through Friday.

**2.1** In addition to the time period specified in 2.0, work performed during *Normal Working Hours* must also be done during daylight hours, unless the contractor provides the necessary lighting equipment. Daylight hours are defined as ½ hour after sunrise to ½ hour before sunset. If the contractor chooses to work during *Normal Working Hours*, but outside of the defined daylight hours, the contractor shall provide lighting equipment at no additional cost to the Commission.

J. Bidding the Adjustment Factors

**1.0** The bidder shall complete the bid form by writing in one adjustment factor for *Normal Working Hours*. The Adjustment Factor shall be specified to three decimal places. Note that these are contract pay items for contractor payment, not work items.

**EXAMPLE:** The Adjustment Factors shall be entered as the following example illustrates.

1	.	1	9	8
or				
0	.	9	8	7

Note: The Adjustment Factors used are for example purposes only and is not an indication of factors being bid by the contractor.

K. Contract Award

**1.0** The Commission will evaluate the bids with the intent of awarding the contract to the lowest responsible bidder. The budget for this project will have a minimum budget of \$0 dollars and an anticipated maximum of \$1,500,000.00 dollars.

**2.0** The lowest bid will be determined by multiplying the Adjustment Factor by the anticipated budget for the adjustment factor. For purposes of bidding this contract, the estimated percentage of work performed during Daytime hours is 20% and Nighttime hours is 80%. The dollar quantities provided in the bid form are anticipated budgets and are not intended to represent the actual value of work that will be assigned.

L. Bonds

**1. 0** The amount of the Bid Bond shall be 5% of the anticipated budget for this project.

**2.0** The amount of the Performance Bond shall be 100% of the anticipated budget for this project.

M. Notice to Proceed

**Delete Sec 108.2 and substitute the following:**

**108.2 Notice to Proceed.** For each Job Order, the engineer will include a notice to proceed, which will stipulate the date the contractor is expected to begin work. The notice to proceed date will normally be 10 working days after the job order is issued.

N. Contract Time for Completion of Job Order

**1.0 Contract Time for Completion of Job Order.** The time for the completion of the job order will be specified by calendar days. Time is an essential element of the contract, and it is therefore important that the work be pursued vigorously to completion.

**2.0 Completion by Calendar Days.** The contractor shall complete all work described in each job order within Fourteen (10) calendar days of the notice to proceed date, or as agreed upon by the engineer and the contractor in the joint scope meeting.

**3.0 Contract Time Extension for Change in the Work.** If a change in the work on a job order is ordered by the engineer, the contractor will be allowed an extension of contract time when it can be established that the additional work required more time. In such cases, the actual time required, as determined by the engineer, will be allowed.

**4.0 Contract Time Extension for Traffic Control Restrictions.** If a traffic control time restriction ordered by the engineer changes the contractor's work schedule on a job order, the contractor will be allowed an extension of contract time when it can be established that the restriction prevented the contractor from performing the work within the contract time. In such cases, the actual restriction time, as determined by the engineer, will be allowed.

**5.0 Contract Time Extension for Unsuitable Weather.** The contractor will not be entitled to any extension of contract time because of unsuitable weather conditions unless authorized in writing by the engineer as an excusable, non-compensable delay under Sec 108.14.1.

O. Completing the Work

**1.0** The contractor shall perform any task in the fixed unit price list for the fixed unit price multiplied by the quantity, multiplied by the appropriate Adjustment Factor for tasks performed during Normal Working Hours. The contractor shall perform the Detailed Scope of Work for the Job Order Price as calculated in accordance with the procedure for developing Job Orders set forth herein.

**2.0** When installed quantities differ from the estimated quantities in the issued Job Order, the as built quantities in the final Job Order will address the quantity variation(s) for final payment. When quantities are not specified in the Detailed Scope of Work, the Job Order Price will be deemed to be lump sum for such work.

**3.0** The contractor shall employ and supply a sufficient force of workers, materials and equipment and shall progress the work with such diligence so as to ensure completion of the Detailed Scope of Work within the Job Order completion Time or within such extended time for completion as may be granted

by the engineer.

P. Final Inspection and Acceptance of the Work

**Delete Secs 105.10.7 through 105.10.7.2 and substitute the following:**

**105.10.7 Final Inspection.** Upon completion of the required work for each Job Order, the contractor shall notify the engineer by phone or electronic mailing, and the engineer will perform an inspection. If the engineer determines all work required by the contract has been satisfactorily completed, the engineer will make the acceptance for maintenance and notify the contractor in writing of the date of acceptance for maintenance.

**105.10.7.1** Work determined to be unsatisfactory by the engineer and not accepted shall be corrected to acceptable standards at the contractor's sole cost. All items that are unsatisfactory shall be corrected within the specified working days for each job order. If needed for correction of unsatisfactory work, the contractor will be given an extension of contract time in an amount equal to the number of working days remaining in the job order at the time the engineer was notified for inspection. No contract time extension will be made for notification made prior to completion of the work. Any time extension given will be considered a non-compensable delay. Upon completion of the corrections, the contractor shall notify the engineer for a re-inspection.

**105.10.7.2** Following a Job Order final inspection, the contractor, subcontractors, and suppliers are relieved of any new or additional liability to third parties for personal injury, death, or property damages which may be alleged to result from the performance of the work required by that job order, unless additional work on the right of way is required by the engineer.

**105.10.7.3** Nothing in this section shall be deemed to excuse the contractor of liability or responsibility for any personal injury, death, or property damages which may arise from acts or the failure to act prior to the final inspection of the work required by the Job Order.

Q. Liquidated Damages for Failure or Delay in Starting or Completing Work on Time

**1.0 Description.** If the contractor, or in case of default, the surety fails to begin the work by the notice to proceed date or fails to complete the work within the mutually agreed schedule included in each job order, the Commission, the traveling public, and state and local police and governmental authorities will be damaged in various ways, including but not limited to, increased construction administration cost, potential liability, traffic and traffic flow regulation cost, traffic congestion and motorist delay, with its resulting cost to the traveling public. These damages are not reasonably capable of being computed or quantified. Therefore, the contractor will be charged with liquidated damages specified in the amount of **\$1000.00 per day** for each full day that the work is not started and **\$1000.00 per day** for each full day that the work is not completed within the required time periods. It shall be the responsibility of the engineer to determine the quantity of excess time.

**2.0** The said liquidated damages specified for beginning work and/or completing work will be assessed in addition to any other applicable liquidated damages specified elsewhere in the contract documents.

R. Contract Payments



**1.0** The contractor shall request payment by submitting an invoice to the engineer. The invoice shall be for the job orders completed and shall be itemized by job order number. A summary of all contract items used, contract unit prices, and total cost shall be included with the invoice.

**1.1** The engineer will make payment estimates for the Job Orders completed and final inspected and the value thereof at the price established in the Job Order, including any necessary adjustments. The payment estimates will include deductions from the contractor's invoice for any liquidated damages applicable to any of the Job Orders.

**1.2 Material Allowance.** No material allowance will be made for this contract.

S. Mobilization

**Delete Sec 618.2 and substitute the following:**

**618.2** One (1) Mobilization will be paid for each Job Order. A Job order will be considered all of the work in a 2-mile segment of commission-maintained roadway for undivided highways. A Job order will be considered all of the work detailed in a 2-mile segment of commission-maintained roadway for a single direction of divided highways.

T. Working Hours

**1.0** Due to the wide variance in traffic volumes throughout the contract area, it is not possible to give specific work hours for the term of the contract. No work will be allowed during the morning and afternoon rush periods unless otherwise directed or approved by the engineer.

**2.0** All work shall be scheduled to avoid major sporting events, conventions, concerts, and similar special events as specified by the engineer. During the term of this contract, there are five major holiday weekends: Memorial Day, Independence Day, Labor Day, Thanksgiving, and Christmas. All lanes shall be scheduled to be open to traffic during these holiday periods, from 12:00 noon on the last working day preceding the holiday until 9:00 a.m. on the first working day subsequent to the holiday, unless otherwise designated by the engineer.

U. Work Zone Traffic Management

**1.0 General.** Work zone traffic management shall be in accordance with applicable portions of Division 100 and Division 600 of the Standard Specifications, and specifically as follows:

**2.0 Traffic Management Schedule.**

**2.1** The contractor shall notify the engineer at least 48 hours prior to performing any work at each work site. The notification shall include all information needed to identify traffic impacts such as work location, anticipated work hours, traffic control plan type, required lane or shoulder closures, anticipated duration of the work, etc. The engineer will make appropriate notification to the public, MoDOT customer service, and MoDOT work crews of the contractor's operations.

**2.2** The contractor shall notify the engineer at the actual time of closing any lane or shoulder and shall

Job No.: JKU0405

Route: Various

County: Various

again notify the engineer when the lane or shoulder is reopened to traffic.

**2.3** The contractor shall notify the engineer as soon as practical any postponement due to weather, material, or other circumstances and shall re-notify the engineer when the work has been rescheduled.

**2.4** In order to ensure minimal traffic interference, the contractor shall schedule lane closures for the absolute minimum amount of time required to complete the work. Lanes shall not be closed until material is available for continuous work and the contractor is prepared to diligently pursue the work until the closed lane is reopened to traffic.

### **3.0 Maintenance of Traffic.**

**3.1** Traffic flow shall be maintained through the work zone using the existing pavement in accordance with the traffic control plans. No detours or lane shifts onto shoulders will be allowed unless otherwise approved by the engineer.

**3.2** Provisions shall be made to allow the movement of emergency vehicles through the limits of the work at all times.

**3.3** During non-working hours the contractor shall have all lanes of traffic open for all routes, ramps, and side roads. All channelizers and other traffic control devices shall be removed from the roadway during non-working hours unless otherwise approved by the engineer.

**4.0 Traffic Congestion and Delay.** The contractor shall, upon approval of the engineer, take proactive measures to reduce traffic congestion in the work zone. The contractor shall be responsible for maintaining the existing traffic flow through the job site during the work. If disruption of the traffic flow occurs and traffic is backed up in queues of 15 minute delays or longer, then the contractor shall review the construction operations which contributed directly to disruption of the traffic flow and make adjustments to the operations to prevent queues from occurring again.

### **5.0 Traffic Safety.**

**5.1** Where traffic queues routinely extend to within 1000 feet (300 m) of the ROAD WORK AHEAD, or similar, sign on a divided highway or to within 500 feet (150 m) of the ROAD WORK AHEAD, or similar, sign on an undivided highway, the contractor shall extend the advance warning area, as approved by the engineer.

**5.2** When a traffic queue extends to within 1000 feet (300 m) of the ROAD WORK AHEAD, or similar, sign on a divided highway or to within 500 feet (150 m) of the ROAD WORK AHEAD, or similar, sign on an undivided highway due to non-recurring congestion, the contractor shall deploy a means of providing advance warning of the traffic congestion, as approved by the engineer. The warning location shall be no less than 1000 feet (300 m) and no more than 0.5 mile (0.8 km) in advance of the end of the traffic queue on divided highways and no less than 500 feet (150 m) and no more than 0.5 mile (0.8 km) in advance of the end of the traffic queue on undivided highways.

**6.0 Traffic Control Plan Types.** The engineer will designate in the job order the type of traffic control plan (TCP) necessary to perform the work. If the engineer determines more than one type of TCP is needed to perform the work, the additional plan or plans will be specified in the job order. The various types of TCP's and the traffic control devices required for each TCP are shown on the plans. The contractor shall furnish adequate channelizing devices as shown on the plans. **The contractor's attention is directed to the fact that trim line or drum-like channelizers are required for all TCP's regardless of daytime or nighttime operations. Cones will not be allowed for use on this contract.**

**7.0 Additional Traffic Control Devices.** The engineer may determine that devices in addition to those shown on the TCP's are necessary to safely accommodate traffic. These devices may be needed for merging ramp traffic, side streets, or other special cases. Additional devices may include signs, channelizers for side streets, directional indicator barricades (DIBS), flashing arrows, and/or truck mounted attenuators. The additional devices shall be used within the work zone as directed by the engineer. The engineer will designate in the job order the type of additional traffic control devices necessary to perform the work.

**8.0 Work Within Another Work Zone.** The engineer may determine it is in the best interest of the Commission and the traveling public to have the work designated in the job order performed within another contractor's work zone or within a MoDOT work zone. If the work is designated to be performed within another work zone, the contractor shall coordinate and perform the work in accordance with Sec 105.6.

**9.0 Basis of Payment.** Payment will be made at the contract unit price for each of the pay items included in the contract and will be considered full compensation for all labor, material, and equipment necessary to manage traffic per the designated traffic control plan or as otherwise directed by the engineer.

**9.1** Payment will be made once for each traffic control plan type specified for each work location regardless of the number of times the traffic control devices are installed, relocated, and removed while work progresses in that work location. **Payment for each traffic control plan includes the cost of all channelizers as shown on the plans. Cones will not be allowed for use on this contract.**

**9.2** Payment will be made once for the actual amount of additional traffic control devices specified for each work location regardless of the number of times the devices are installed, relocated, and removed while work progresses.

**9.3** No traffic control plan payment will be made when work is performed within another work zone unless additional traffic control devices are required to safely accommodate traffic.

V. Truck Mounted Attenuator (TMA)

**1.0 Description.** If a truck mounted attenuator (TMA) is shown for use in a traffic control plan or if an additional TMA is specified in the job order for use at a specific work location, the contractor shall furnish, operate, repair, replace, and maintain a TMA as indicated on the plans or as directed by the engineer.

**2.0 Basis of Payment.** Payment will be made at the contract unit price for each of the pay items included in the contract and will be considered full compensation for all labor, material, and equipment necessary to furnish and maintain the TMA.

**2.1** If a truck mounted attenuator (TMA) is shown for use in a traffic control plan, then payment will be considered covered by the contract unit price of that plan.

**2.2** If an additional TMA is specified in the job order for use at a specific work location, the TMA will be paid for once at the established fixed unit price for:

Item 616-99.02      Additional Truck Mounted Attenuator      Each

**W.      Emergency Provisions and Incident Management**

**1.0** The contractor shall have communication equipment on the construction site or immediate access to other communication systems to request assistance from the police or other emergency agencies for incident management. In case of traffic accidents or the need for police to direct or restore traffic flow through the job site, the contractor shall notify police or other emergency agencies immediately as needed. MoDOT customer service shall also be notified when the contractor requests emergency assistance.

**2.0** In addition to the 911 emergency telephone number for ambulance, fire or police services, the following agencies may also be notified for an accident or emergency within the project limits.

Missouri Highway Patrol	(816) 325-5925
MoDOT KC District Customer Service (24 hr.)	(888) 275-6636
MoDOT Incident Response (24 hr.)	(888) 275-6636
Jackson County Police	(816) 541-8017
Platte County Police Department	(816) 858-2424
Clay County Police Department	(816) 407-3750
Cass County Sheriff	(816) 380-5200

**2.1** This list is not all inclusive. Notification of the need for wrecker or tow truck services will remain the responsibility of the appropriate police agency.

**2.2** The contractor shall notify enforcement and emergency agencies before the start of construction to request their cooperation and to provide coordination of services when emergencies arise during the construction at the project site. When the contractor completes this notification with enforcement and emergency agencies, a report shall be furnished to the engineer on the status of incident management.

**3.0** No direct pay will be made to the contractor to recover the cost of the communication equipment, labor, materials, or time required to fulfill the above provisions.

**X.      Delay Provisions**

**1.0** If the contractor is delayed in the commencement, prosecution, or completion of the work by any act of the Commission, or by any cause beyond the contractor's control, then the contractor will be entitled to an extension of time. If the contractor is delayed or prevented from working on a particular date as a result of a delay, error or omission of the Commission, and the contractor incurs unavoidable labor costs as a direct result thereof because the contractor did not have enough time to cancel or divert its labor force, then the contractor will be reimbursed for such costs. For each worker so paid, the contractor will be reimbursed the amount paid the worker.

Also, the contractor will be reimbursed for construction tasks required as a direct result of such delay, error, or omission, such as closing off areas of work. No other costs shall be paid as a result of a delay or late cancellation.

#### Y. Sample Job Orders

**1.0** The following are example Job Orders intended to be illustrations that may be used as a guide for formulating the bid of the Adjustment Factor. For each example Job Order, the appropriate items that would be used and the quantities are computed based upon the sample work that would be completed in the Job Order. The contractor shall be reminded these are Job Order samples and the quantity totals in actual Job Orders, if issued, may be more or less than that depicted below or be totally different from the samples illustrated.

**1.1 Job Order Sample 1:** The work is replacing 30 commission furnished mile marker signs on contractor furnished PSST Posts and anchors on a 11.6 miles section of Eastbound I-44, and a 11.2 mile section of westbound I-44 in St. Louis County. This is a divided interstate. The work will only require shoulder closures. The Contractors bid a Normal Work Adjustment Factor of 1.198 for the contract. A List of Sign locations was included (See Below).

Item Description	Quantity	Unit	Fixed Unit Price	Price
Misc. Shoulder Work and Work Beyond the Shoulder	12	EA	\$250.00	\$3,000.00
Misc. Sign Post Removal	4	EA	\$75.00	\$300.00
Misc. Sign Removal	5	EA	\$50.00	\$250.00
Misc. Furnishing and Installing Driven Anchor (PSST Post, 7GA)	29	EA	\$50.00	\$1,450.00
Misc. Furnishing and Installing 2.5" PSST Post – 12 GA	232	LF	\$12.00	\$2,784.00
Misc. Installing Commission Furnished Sheet Metal Sign	30	EA	\$150.00	\$4,500.00
Misc. Job Order Material Pick up	1	EA	\$250.00	\$250.00
Mobilization (1 EA per 2 Mile Segment)	12	EA	\$750.00	\$9,000.00
			<b>Subtotal:</b>	<b>\$21,534.00</b>
Normal Work Adjustment Factor			1.198	
			<b>TOTAL:</b>	<b>\$25,797.73</b>

Work Request #2020-205  
(Old database #2020-0094)

I-44, St. Louis County  
Franklin County to MO 141

# 2020 Annual sign replacements – Emergency Reference Markers

## Eastbound

MM 259.6	Replace missing sign and post	Lat./Long. 38.49852, -90.71577
MM 260.2	Replace missing sign and post	Lat./Long. 38.50160, -90.70539
MM 263.2	Replace missing sign and post	Lat./Long. 38.50378, -90.65055
MM 263.4	Replace sign on existing post	
MM 265.6	Replace missing sign and post	Lat./Long. 38.50366, -90.60750
MM 266.0	Replace missing sign and post	Lat./Long. 38.50257, -90.60027
MM 267.8	Replace missing sign and post	Lat./Long. 38.50748, -90.56787
MM 268.4	Replace missing sign and post	Lat./Long. 38.50794, -90.55716
MM 269.0	Replace missing sign and post	Lat./Long. 38.51500, -90.54982
MM 269.8	Replace missing sign and post	Lat./Long. 38.52505, -90.54381
MM 270.2	Replace missing sign and post	Lat./Long. 38.52775, -90.53776
MM 271.2	Replace knockdown sign and post	Lat./Long. 38.53346, -90.52080

## Westbound

MM 270.6	Replace missing sign and post	Lat./Long. 38.52973, -90.53069
MM 270.4	Replace missing sign and post	Lat./Long. 38.52863, -90.53394
MM 269.0	Replace missing sign and post	Lat./Long. 38.51514, -90.55031
MM 268.6	Replace knockdown sign and post	Lat./Long. 38.51036, -90.55483
MM 268.0	Replace missing sign and post	Lat./Long. 38.50746, -90.56406
MM 267.8	Replace post, reuse existing sign	
MM 267.2	Replace missing sign and post	Lat./Long. 38.50606, -90.57853
MM 266.6	Replace missing sign and post	Lat./Long. 38.50501, -90.58944
MM 265.2	Replace missing sign and post	Lat./Long. 38.50510, -90.61427
* MM 264.8	Replace missing sign and post	Lat./Long. 38.50626, -90.62162
* MM 263.8	Replace missing sign and post	Lat./Long. 38.50462, -90.63969
MM 263.4	Replace missing sign and post	Lat./Long. 38.50403, -90.64683
MM 262.8	Replace missing sign and post	Lat./Long. 38.50425, -90.65784
* MM 261.8	Replace missing sign and post	Lat./Long. 38.50582, -90.67599
MM 261.0	Replace missing sign and post	Lat./Long. 38.50409, -90.69059
* MM 260.4	Replace missing sign and post	Lat./Long. 38.50248, -90.70139
* MM 259.6	Replace missing sign and post	Lat./Long. 38.49893, -90.71534
MM 259.4	Replace knockdown sign and post	Lat./Long. 38.49784, -90.71885

Job No.: JKU0405

Route: Various

County: Various

**1.2 Job Order Sample 2:** The work includes replacement of existing signage on Route B in St. Charles County. The contractor is to install commission furnished signs on existing posts, and to remove and replace some posts and signs. This is a undivided highway and flagging operations will be required for the project. The total length of the Project is 8.534 miles. The contractor Bid a Normal Work Factor of 1.720 for the contract. A list of sign locations was included (See below).

Item Description	Quantity	Unit	Fixed Unit Price	Price
Misc. 1-Lane 2-Way Operation w/ Flaggers	5	EA	\$1500.00	\$7,500.00
Misc. Sign Removal	32	EA	\$50.00	\$1,600.00
Misc. Sign Post Removal	8	EA	\$75.00	\$600.00
Misc. Sign Post Anchor Removal	8	EA	\$50.00	\$400.00
Misc. Furnishing and Installing 2.5 In. PSST Post – 12 GA	80	LF	\$12.00	\$960.00
Misc. Furnishing and Installing Driven Anchor (PSST Post) – 7 GA	8	EA	\$50.00	\$400.00
Misc. Installation of Commission Furnished Sheet Metal Sign	32	EA	\$150.00	\$4,800.00
Mobilization (1 EA per 2 Mile Segment)	5	EA	\$750.00	\$3,750.00
Misc. Job Order Material Pick up	1	EA	\$250.00	\$250.00
			<b>Subtotal:</b>	<b>\$20,260.00</b>
Normal Work Adjustment Factor			1.720	
			<b>TOTAL:</b>	<b>\$34,847.20</b>



Job No.: JKU0405

Route: Various

County: Various

Signing List

County: St Charles  
Route: B  
RMS:  
Direction: EB  
WR#:

Log TMS Cont.	Lat.	Long.	Action	Sign # (For New)	Size	Sign Legend	Comments
0.679	38.86131	-90.60634	Replace sign/Plum post	W8-34 (36in)	36x36	IMPASSABLE DURING HIGH WATER 36"x36"	approx 1200ft west from Lakeview Dr.
0.802	38.86131	-90.60406	Replace sign/Plum post	W1-1R (36in)	36x36	Right Turn	approx.600ft west from Lakeview Dr
0.802	38.86131	-90.60406	Replace sign/Plum post	W13-1P 30 (24in)	24x24	Advisory Speed Plaque 30 M.P.H.	approx.600ft west from Lakeview Dr
0.890	38.86126	-90.60244	Replace	W1-6	48x24	Single Arrow Board	approx 150ft west from Lakeview Dr
1.287	38.85573	-90.6019	Replace	W1-1L (36in)	36x36	Left Turn	1900ft east from Lakeview Dr
1.287	38.85573	-90.6019	Replace	W13-1P 30 (24in)	24x24	Advisory Speed Plaque 30 M.P.H.	1900ft east from Lakeview Dr
2.860	38.85300	-90.57439	Replace	W8-34 (36in)	36x36	IMPASSABLE DURING HIGH WATER 36"x36"	approx 2800ft west from Golden Eagle Ferry Rd.
4.011	38.8529	-90.5531	Plumb			Weight Limit 40 Tons	approx.850ft west from Lehman Rd
7.201	38.85324	-90.49398	Replace	W1-1R (36in)	36x36	Right Turn	approx. 600ft west from Washeon Rd
7.201	38.85324	-90.49398	Replace	W13-1P 25 (24in)	24x24	Advisory Speed Plaque 25 M.P.H.	approx. 600ft west from Washeon Rd
7.509	38.8501	-90.49192	Replace	W1-1L (36in)	36x36	Left Turn	approx. 1100ft east from Washeon Rd
7.509	38.8501	-90.49192	Replace	W13-1P 25 (24in)	24x24	Advisory Speed Plaque 25 M.P.H.	
9.054	38.83416	-90.47126	Replace	M2-1 White	21x15	JCT (Junction Sign-White)	approx. 660ft west from MO94
9.054	38.83416	-90.47126	Replace	M1-5_94	24"x24"	Missouri Route Shield 94	approx. 660ft west from MO94
9.075	38.83377	-90.47074	Replace/Plumb	W3-1 (36in)	36x36	Stop Ahead (Symbol) 36"x36"	approx. 400ft west from MO94
END							

Job No.: JKU0405

Route: Various

County: Various

# Signing List

County: St. Charles

Route: B

RMS:

Direction: WB

WR#:

Log TMS Cont.	Lat.	Long.	Action	Sign # (For New)	Size	Sign Legend	Comments
1.561	38.84816	-90.49062	Replace/Plumb	W1-1R (36in)	36x36	Right Turn	approx.100ft east from New Town Blvd
1.561	38.84816	-90.49062	Replace/Plumb	W13-1P_25 (24in)	24x24	Advisory Speed Plaque 25 M.P.H.	approx.100ft east from New Town Blvd
1.800	38.85141	-90.49183	Replace	M17-7	18"x24"	MRT (Mississippi River Trail)	approx.1200ft west from New Town Blvd
1.800	38.85141	-90.49183	Replace	M5-1L_Green	21"x15"	Advance Turn Arrow 90 Degrees Left-Green	approx.1200ft west from New Town Blvd
1.826	38.85179	-90.49184	Replace	W1-1L (36in)	36x36	Left Turn	approx.1350ft west from New Town Blvd
1.826	38.85179	-90.49184	Replace	W13-1P_25 (24in)	24x24	Advisory Speed Plaque 25 M.P.H.	approx.1350ft west from New Town Blvd
6.202	38.85278	-90.57149	Replace	M17-7	18"x24"	MRT (Mississippi River Trail)	approx.2000ft west from Golden Eagle Ferry Rd
8.205	38.85969	-90.60179	Plumb			Left Turn/ADV 30	approx. 550ft east of Lakeview Dr.
8.263	38.86052	-90.60174	Replace	M1-5a_B	24"x24"	Missouri Lettered Route Shield B	approx.245ft east from Lakeview Dr
8.263	38.86052	-90.60174	Replace	M6-2L_White	21"x15"	45 Degrees Left Arrow-White	approx.245ft east from Lakeview Dr
8.999	38.86134	-90.61484	Replace	W3-1 (36in)	36x36	Stop Ahead (Symbol) 36"x36"	approx. 1100ft east from Route C
9.078	38.86134	-90.6163	Replace	M2-1_White	21x15	JCT (Junction Sign-White)	approx.500ft east from Route C
9.078	38.86134	-90.6163	Replace	M1-5a_C	24"x24"	Missouri Lettered Route Shield C	approx.500ft east from Route C
9.212	38.86135	-90.61879	Replace	R1-1 (36in)	36x36	STOP	at Route C
9.213	38.86135	-90.61881	Replace	M1-5a_C	24"x24"	Missouri Lettered Route Shield C	on Route C facing Route B
9.213	38.86135	-90.61881	Replace	M6-4_White	21"x15"	Two Way Arrow-White	on Route C facing Route B
9.213	38.86135	-90.61881	Replace	W1-7	48x24	Double Arrow Board 48"x24"	on Route C facing Route B
END							

Job No.: JKU0405

Route: Various

County: Various

**1.3 Job Order Sample 3:** The work includes the installation of 2 Commission Furnished Adopt-A-Highway signs and Remove and Relocate a Speed limit sign (sign considered Commission Furnished) on Route D in St. Louis County. Work will be in 2 sections of roadway that are 11.6 miles apart. One section of Roadway will require shoulder work and the other will require a single lane closure. The contractor is to furnish and Install new 2.5" PSST posts and driven anchors. The work will require a Shoulder Closure and a Single Right Lane Drop. This is a divided highway. The Contractor Bid a Normal Work Adjustment Factor of 1.300 for the Contract. Supporting Documents for the Work Order were included for Sign Location (See Below).

Item Description	Quantity	Unit	Fixed Unit Price	Price
Misc. Single Lane Closure	1	EA	\$750.00	\$750.00
Misc. Shoulder Work and Work Beyond The Shoulder	1	EA	\$250.00	\$250.00
Misc. Sign Removal	1	EA	\$50.00	\$50.00
Misc. Sign Post Removal	1	EA	\$75.00	\$75.00
Misc. Sign Post Anchor Removal	1	EA	\$50.00	\$50.00
Misc. Furnishing and Installing 2.5 In. PSST Post – 12 GA	30	LF	\$12.00	\$360.00
Misc. Furnishing and Installing Driven Anchor (PSST Post) – 7 GA	3	EA	\$50.00	\$150.00
Misc. Installation of Commission Furnished Sheet Metal Sign	3	EA	\$150.00	\$450.00
Mobilization (1 EA per 2 Mile Segment)	2	EA	\$750.00	\$1,500.00
Misc. Job Order Material Pick up	1	EA	\$250.00	\$250.00
			<b>Subtotal:</b>	<b>\$3,735.00</b>
Normal Work Adjustment Factor			1.300	
			<b>TOTAL:</b>	<b>\$4,855.50</b>

Job No.: JKU0405

Route: Various

County: Various

2022-917



Install a AAH background sign and a Canteen Vending name plaque. Use one 2.5" PSST with a flag holder mounted on the side closest to the travelway.

38.69870/-90.42221 @ L.P. 1.828

Rt D EB west of Westport Center Dr. The location has been marked.



Install relocated Speed Limit 55 sign.

38.69736/-90.41367 @ L.P. 13.421

Rt D WB west of Millpark Dr. The location has been marked.



Remove Speed Limit 55 sign and then install a AAH background sign and a Canteen Vending name plaque. Install a flag holder mounted on the side closest to the travelway.

38.69762/-90.41485 @ L.P. 13.488

Rt WB west of Millpark Dr.

Job No.: JKU0405

Route: Various

County: Various

**1.4 Job Order Sample 4:** The work includes the installation of Commission Furnished signs on Route BB in Jefferson County. The work will take place in 2 separate sections of the roadway (One section is 0.49 miles long and the other is .685 miles long). Some signs will be replaced with a new sign only utilizing existing posts and some signs will require the installation of new posts. The contractor is to furnish and install new 2.5" PSST posts and driven anchors. The work will require flagging operations. This is a undivided highway. The Contractor Bid a Normal Work Adjustment Factor of 0.980 for the Contract. Supporting Documents for the Work Order were included for Sign Location (See Below).

Item Description	Quantity	Unit	Fixed Unit Price	Price
Misc. 1-Lane 2-Way Operation with Flaggers	2	EA	\$1,500.00	\$3,000.00
Misc. Sign Removal	12	EA	\$50.00	\$600.00
Misc. Sign Post Removal	1	EA	\$75.00	\$75.00
Misc. Sign Post Anchor Removal	1	EA	\$50.00	\$50.00
Misc. Furnishing and Installing 2.5 In. PSST Post – 12 GA	32	LF	\$12.00	\$224.00
Misc. Furnishing and Installing Driven Anchor (PSST Post) – 7 GA	4	EA	\$50.00	\$200.00
Misc. Installation of Commission Furnished Sheet Metal Sign	15	EA	\$150.00	\$2,250.00
Mobilization (1 EA per 2 Mile Segment)	2	EA	\$750.00	\$1,500.00
Misc. Job Order Material Pick up	1	EA	\$250.00	\$250.00
			<b>Subtotal:</b>	<b>\$8,149.00</b>
Normal Work Adjustment Factor			0.980	
			<b>TOTAL:</b>	<b>\$7,986.02</b>

County: Various

Page 1

<b>County:</b>	Jefferson
<b>Route:</b>	BB
<b>ORG:</b>	7F32
<b>Direction:</b>	NB
<b>WR#:</b>	2021-287



County: Various

Page 1

<b>County:</b>	Jefferson
<b>Route:</b>	BB
<b>ORG:</b>	7F32
<b>Direction:</b>	SB
<b>WR#:</b>	2021-287

29

**1.5 Job Order Sample 5:** The work includes removal of existing signs and posts, the installation of Commission Furnished signs on Route A and Route 100 in Franklin County in the City of Washington. Some signs will be replaced with a new sign only utilizing existing posts and some signs will require the installation of signs and new posts. The work will require flagging operations and Shoulder work. All routes in the job order are undivided highways and the work will take place in sections that are less than 2 miles in length. The Contractor Bid a Normal Work Adjustment Factor of 1.350 for the Contract. Supporting Documents for the Work Order were included for Sign Location (See Below).

Item Description	Quantity	Unit	Fixed Unit Price	Price
Misc. 1-Lane 2-Way Operation with Flaggers	2	EA	\$1,500.00	\$3,000.00
Misc. Shoulder Work and Work Beyond the Shoulder	1	EA	\$250.00	\$250.00
Misc. Sign Removal	11	EA	\$50.00	\$550.00
Misc. Sign Post Removal	7	EA	\$75.00	\$525.00
Misc. Sign Post Anchor Removal	5	EA	\$50.00	\$250.00
Misc. Furnishing and Installing 2.5 In. PSST Post – 12 GA	60	LF	\$12.00	\$720.00
Misc. Furnishing and Installing Round Pipe Post	58	LB	\$6.00	\$348.00
Misc. Concrete Footings Embedded	1	EA	\$350.00	\$350.00
Mis. Furnishing and Placing Break Away Assembly (Round Pipe Post)	1	EA	\$150	\$150.00
Misc. Furnishing and Installing Driven Anchor (PSST Post) – 7 GA	6	EA	\$50.00	\$300.00
Misc. Installation of Commission Furnished Sheet Metal Sign	10	EA	\$150.00	\$1,500.00
Mobilization (1 EA per 2 Mile Segment)	3	EA	\$750.00	\$2,250.00
Misc. Job Order Material Pick up	1	EA	\$250.00	\$250.00
			<b>Subtotal:</b>	<b>\$10,443.00</b>
Normal Work Adjustment Factor			1.350	
			<b>TOTAL:</b>	<b>\$14,098.05</b>



**Sign Relocate/Remove/Install**

WR # 2022-936

CR# 21-45-SL-3661-9

Location: MO 100 at High St

Contact: Akhand M. Ashek

314-370-9844



WR\_2022\_776

EB-MO 100 and East of Judy Ln





## Z. Utilities

**1.0** It is the inherent risk of the work under this contract that the contractor may encounter utilities above and/or below the ground or in the vicinity of any given job order which may interfere with their operations. The contractor expressly acknowledges and assumes this risk even though the nature and extent is unknown to both the contractor and the Commission at the time of bidding and award of the contract. The effect in cost or time of the presence of utilities above, below or in the vicinity of the contractor's work under this contract shall not be compensable.

## AA. Work Plan and Schedule for Accomplishing Work

**Delete Secs 108.4 - 108.4.4 and substitute the following:**

**108.4 Work Plan and Schedule.** Prior to or at the preconstruction conference, the contractor shall provide a proposed work plan and typical schedule for accomplishing the work. The work plan shall include a written list of equipment and personnel that the contractor intends to use in executing the work.

**108.4.1** The work plan will be reviewed by the engineer to determine in general if adequate personnel and equipment appear to be available to complete the work within the required number of calendar days. If the engineer determines the work plan is inadequate, the engineer and contractor shall meet for a joint review of the plan to correct and adjust the plan and schedule as necessary. A revised work plan and schedule shall be provided by the contractor prior to commencing the work.



**108.4.2** If multiple job orders are issued with overlapping completion periods, the priority of the work will be jointly determined by the engineer and the contractor, with final approval of the work plan by the engineer. The work schedule and work priorities will be determined by the needs of the Commission and not the contractor's convenience of work location.

**108.4.3** No direct payment will be made for furnishing the work plan or revisions.

**108.4.4** The contractor shall determine the most feasible work plan and schedule consistent with the requirements of the contract. The engineer's approval of contractor's work plan is not intended to be acknowledgment or representation that it is reasonable or will accomplish the work within a particular time or at a particular cost.

BB. Supplemental Revisions JSP-18-01AA

Compliance with [2 CFR 200.216 – Prohibition on Certain Telecommunications and Video Surveillance Services or Equipment](#).

The Missouri Highways and Transportation Commission shall not enter into a contract (or extend or renew a contract) using federal funds to procure or obtain equipment, services, or systems that uses covered telecommunications equipment or services as substantial or as critical technology as part of any system where the video surveillance and telecommunications equipment was produced by Huawei Technologies Company, ZTE Corporation, Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities).

## Stormwater Compliance Requirements

**1.0 Description.** This provision requires the contractor to provide a Water Pollution Control Manager (WPCM) for any project that includes land disturbance on the project site and the total area of land disturbance, both on the project site, and all Off-site support areas, is one (1) acre or more. Regardless of the area of Off-site disturbance, if no land disturbance occurs on the project site, these provisions do not apply. When a WPCM is required, all sections within this provision shall be applicable, including assessment of specified Liquidated Damages for failure to correct Stormwater Deficiencies, as specified herein. This provision is in addition to any other stormwater, environmental, and land disturbance requirements specified elsewhere in the contract.

**1.1 Definitions.** The project site is defined as all areas designated on the plans, including temporary and permanent easements. The project site is equivalent to the "permitted site", as defined in MoDOT's State Operating Permit. An Off-site area is defined as any location off the project site the contractor utilizes for a dedicated project support function, such as, but not limited to, staging area, plant site, borrow area, or waste area.

**1.2 Reporting of Off-Site Land Disturbance.** If the project includes any planned land disturbance on the project site, prior to the start of work, the contractor shall submit a written report to the engineer that discloses all Off-site support areas where land disturbance is planned, the total acreage of anticipated land disturbance on those sites, and the land disturbance permit number(s). Upon request by the engineer, the contractor shall submit a copy of its land disturbance permit(s) for Off-site locations. Based on the total acreage of land disturbance, both

on and Off-site, the engineer shall determine if these Stormwater Compliance Requirements shall apply. The Contractor shall immediately report any changes to the planned area of Off-site land disturbance. The Contractor is responsible for obtaining its own separate land disturbance permit for Off-site areas.

**2.0 Water Pollution Control Manager (WPCM).** The Contractor shall designate a competent person to serve as the Water Pollution Control Manager (WPCM) for projects meeting the description in Section 1.0. The Contractor shall ensure the WPCM completes all duties listed in Section 2.1.

**2.1 Duties of the WPCM:**

- (a) Be familiar with the stormwater requirements including the current MoDOT State Operating Permit for construction stormwater discharges/land disturbance activities; MoDOT's statewide Stormwater Pollution Prevention Plan (SWPPP); the Corps of Engineers Section 404 Permit, when applicable; the project specific SWPPP, the Project's Erosion & Sediment Control Plan; all applicable special provisions, specifications, and standard drawings; and this provision;
- (b) Successfully complete the MoDOT Stormwater Training Course within the last 4 years. The MoDOT Stormwater Training is a free online course available at [MoDOT.org](http://MoDOT.org);
- (c) Attend the Pre-Activity Meeting for Grading and Land Disturbance and all subsequent Weekly Meetings in which grading activities are discussed;
- (d) Oversee and ensure all work is performed in accordance with the Project-specific SWPPP and all updates thereto, or as designated by the engineer;
- (e) Review the project site for compliance with the Project SWPPP, as needed, from the start of any grading operations until final stabilization is achieved, and take necessary actions to correct any known deficiencies to prevent pollution of the waters of the state or adjacent property owners prior to the engineer's weekly inspections;
- (f) Review and acknowledge receipt of each MoDOT Inspection Report (Land Disturbance Inspection Record) for the Project within forty eight (48) hours of receiving the report and ensure that all Stormwater Deficiencies noted on the report are corrected as soon as possible, but no later than stated in Section 5.0.

**3.0 Pre-Activity Meeting for Grading/Land Disturbance and Required Hold Point.** A Pre-Activity meeting for grading/land disturbance shall be held prior to the start of any land disturbance operations. No land disturbance operations shall commence prior to the Pre-Activity meeting except work necessary to install perimeter controls and entrances. Discussion items at the pre-activity meeting shall include a review of the Project SWPPP, the planned order of grading operations, proposed areas of initial disturbance, identification of all necessary BMPs that shall be installed prior to commencement of grading operations, and any issues relating to compliance with the Stormwater requirements that could arise in the course of construction activity at the project.

**3.1 Hold Point.** Following the pre-activity meeting for grading/land disturbance and subsequent installation of the initial BMPs identified at the pre-activity meeting, a Hold Point shall occur prior to the start of any land disturbance operations to allow the engineer and WPCM the time needed

to perform an on-site review of the installation of the BMPs to ensure compliance with the SWPPP is met. Land disturbance operations shall not begin until authorization is given by the engineer.

**4.0 Inspection Reports.** Weekly and post run-off inspections will be performed by the engineer and each Inspection Report (Land Disturbance Inspection Record) will be entered into a web-based Stormwater Compliance database. The WPCM will be granted access to this database and shall promptly review all reports, including any noted deficiencies, and shall acknowledge receipt of the report as required in Section 2.1 (f.).

**5.0 Stormwater Deficiency Corrections.** All stormwater deficiencies identified in the Inspection Report shall be corrected by the contractor within 7 days of the inspection date or any extended period granted by the engineer when weather or field conditions prohibit the corrective work. If the contractor does not initiate corrective measures within 5 calendar days of the inspection date or any extended period granted by the engineer, all work shall cease on the project except for work to correct these deficiencies, unless otherwise allowed by the engineer. All impact costs related to this halting of work, including, but not limited to stand-by time for equipment, shall be borne by the Contractor. Work shall not resume until the engineer approves the corrective work.

**5.1 Liquidated Damages.** If the Contractor fails to complete the correction of all Stormwater Deficiencies listed on the MoDOT Inspection Report within the specified time limit, the Commission will be damaged in various ways, including but not limited to, potential liability, required mitigation, environmental clean-up, fines, and penalties. These damages are not reasonably capable of being computed or quantified. Therefore, the contractor will be charged with liquidated damages specified in the amount of \$2,000 per day for failure to correct one or more of the Stormwater Deficiencies listed on the Inspection Report within the specified time limit. In addition to the stipulated damages, the stoppage of work shall remain in effect until all corrections are complete.

**6.0 Basis of Payment.** No direct payment will be made for compliance with this provision.

#### Anti-Discrimination Against Israel Certification

By signing this contract, the Company certifies it is not currently engaged in and shall not, for the duration of the contract, engage in a boycott of goods or services from the State of Israel, companies doing business in or with Israel or authorized by, licensed by, or organized under the laws of the State of Israel, or persons or entities doing business in the State of Israel as defined by Section 34.600 RSMo. This certification shall not apply to contracts with a total potential value of less than One Hundred Thousand Dollars (\$100,000) or to contractors with fewer than ten (10) employees.

#### Ground Tire Rubber (GTR) Dry Process Modification of Bituminous Pavement Material

**1.0 Description.** This work shall consist of the dry process of adding ground tire rubber (GTR) to modify bituminous material to be used in highway construction. Existing GTR requirements in Section 1015 pertain to the wet process method of GTR modification that blends GTR with the asphalt binder (terminal blending or blending at HMA plant). The following requirements shall govern for dry process GTR modification. The dry process method adds GTR as a fine aggregate or mineral filler during mix production. All GTR modified asphalt mixtures shall be in accordance with Secs 401, 402, or 403 as specified in the contract; except as revised by this specification.

**2.0 Materials.** The contractor shall furnish a manufacturer's certification to the engineer for each shipment of GTR furnished stating the name of the manufacturer, the chemical composition, workability additives, and certifying that the GTR supplied is in accordance with this specification.

**2.1 Product Approval.** The GTR product shall contain a Trans-Polyoctenamer (TOR) added at 4.5 % of the weight of the crumb rubber or an engineered crumb rubber (ECR) workability additive that has proven performance in Missouri. Other GTR additives shall be demonstrated and proven prior to use such as a five-year field performance history in other states or performance on a federal or state-sanctioned accelerated loading facility.

**2.2 General.** GTR shall be produced from processing automobile or truck tires by ambient or cryogenic grinding methods. Heavy equipment tires, uncured or de-vulcanized rubber will not be permitted. GTR shall also meet the following material requirements:

<b>Table 1 – GTR Material Properties</b>		
<b>Property</b>	<b>Test Method</b>	<b>Criteria</b>
Specific Gravity	ASTM D1817	1.02 to 1.20
Metal Contaminates	ASTM D5603	$\leq 0.01\%$
Fiber Content	ASTM D5603	$\leq 0.5\%$
Moisture Content	ASTM D1509	$\leq 1.0\%^*$
Mineral Filler	AASHTO M17	$\leq 4.0\%$

\*Moisture content of the GTR shall not cause foaming when combined with asphalt binder and aggregate during mix production

**2.3 Gradation.** The GTR material prior to TOR or ECR workability additives shall meet the following gradation and shall be tested in accordance with ASTM D5603 and ASTM D5644.

<b>Table 2 – GTR Gradation</b>	
<b>Sieve</b>	<b>Percent Passing by Weight</b>
No. 20	100
No. 30	98-100
No. 40	50-70
No. 100	5-15

**3.0 Delivery, Storage, and Handling.** The GTR shall be supplied in moisture-proof packaging or other appropriate bulk containers. GTR shall be stored in a dry location protected from rain before use. Each bag or container shall be properly labeled with the manufacturer's designation for the GTR and specific type, mesh size, weight and manufacturer's batch or Lot designation.

**4.0 Feeder System.** Dry Process GTR shall be controlled with a feeder system using a proportioning device that is accurate to within  $\pm 3$  percent of the amount required. The system shall automatically adjust the feed rate to always maintain the material within this tolerance and shall have a convenient and accurate means of calibration. The system shall provide in-process monitoring, consisting of either a digital display of output or a printout of feed rate, in pounds per minute, to verify feed rate. The supply system shall report the feed in 1-pound increments using

load cells that will enable the user to monitor the depletion of the GTR. Monitoring the system volumetrically will not be allowed. The feeder shall interlock with the aggregate weight system and asphalt binder pump to maintain correct mixture proportions at all production rates.

Flow indicators or sensing devices for the system shall be interlocked with the plant controls to interrupt mixture production if GTR introduction rate is not within  $\pm 3$  percent. This interlock will immediately notify the operator if GTR introduction rate exceeds introduction tolerances. All plant production will cease if the introduction rate is not brought back within tolerance after 30 seconds. When the interlock system interrupts production and the plant has to be restarted, upon restarting operations; the modifier system shall run until a uniform feed can be observed on the output display. All mix produced prior to obtaining a uniform feed shall be rejected.

**4.1 Batch Plants.** GTR shall be added to aggregate in the weigh hopper. Mixing times shall be increased per GTR manufacturer recommendations.

**4.2 Drum Plants.** The feeder system shall add GTR to aggregate and liquid binder during mixing and provide sufficient mixing time to produce a uniform mixture. The feeder system shall ensure GTR does not become entrained in the exhaust system of the drier or plant and is not exposed to the drier flame at any point after introduction.

**5.0 Testing During Mixture Production.** Testing of asphalt mixes containing GTR shall not begin until at least 30 minutes after production or per additive supplier's recommendation.

**6.0 Construction Requirements.** Mixes containing GTR shall have a target mixing temperature of 325 F or as directed by the GTR additive supplier. The additive supplier's recommendations shall be followed to allow for GTR binder absorption/reaction. This may include holding mix in the silo to allow time for binder to absorb into the GTR. Rolling operations may need to be modified.

**7.0 Mix Design Test Method Modification.** A formal mixing procedure from the additive supplier shall be provided to the contractor and engineer that details the proper sample preparation, including blending GTR with the binder or other additives. Samples shall be prepared and fabricated in accordance with this procedure by the engineer and contractor throughout the duration of the project.

**8.0 Mix design Volumetrics.** Mix design volumetric equations shall be modified as follows:

**8.1** Additional virgin binder added to offset GTR absorption of binder shall be counted as part of the mix virgin binder

**8.2** GTR shall be included as part of the aggregate when calculating VMA of the mix.

**8.2.1** GTR SPG shall be 1.15

**8.3** Mix  $G_{sb}$  used to determine VMA shall be calculated as follows:

$$G_{sb (JMF)} = \frac{(100 - P_{bmv})}{\left(\frac{P_s}{G_{sb}} + \frac{P_{GTR}}{G_{GTR}}\right)}$$

where:

$G_{sb (JMF)}$  = bulk specific gravity of the combined aggregate including GTR

$P_{bmv}$  = percent virgin binder by total mixture weight

$P_s$  = percent aggregate by total mixture weight (not including GTR)

$P_{GTR}$  = percent GTR by total mixture weight

$G_{sb}$  = bulk specific gravity of the combined aggregate (not including GTR)

$G_{GTR}$  = GTR specific gravity

**8.4**  $G_{se}$  shall be calculated as follows:

$$G_{se} = \frac{(100 - P_b - P_{GTR})}{\left(\frac{100}{G_{mm}} - \frac{P_b}{G_b} - \frac{P_{GTR}}{G_{GTR}}\right)}$$

**8.5**  $P_{be}$  shall be calculated as follows:

$$P_{be} = P_b - \frac{P_{ba}}{100} * (P_s + P_{GTR})$$

**9.0 Minimum GTR Amount.** The minimum dosage rate for GTR shall be 5 % by weight of total binder for an acceptable one bump grade or 10 % by weight of total binder for an acceptable two bump grade as detailed in the following table. Varying percentage blends of GTR and approved additives may be used as approved by the engineer with proven performance and meeting the specified requirements of the contract grade.

Contract Binder Grade	Percent Effective Virgin Binder Replacement Limits	Required Virgin Binder Grade	Minimum GTR Dosage Rate
PG 76-22	0 - 20	PG 70-22	5 %
		PG 64-22	10 %
PG 70-22	0 - 30	PG 64-22	5 %
		PG 58-28	10 %
PG 64-22	0 - 40*	PG 58-28	5 %
		PG 52-34	10 %
PG 58-28	0 - 40*	PG 52-34	5 %
		PG 46-34	10 %

\* Reclaimed Asphalt Shingles (RAS) may be used when the contract grade is PG 64-22 or PG 58-28. RAS replacement shall follow the 2 x RAS criteria when calculating percent effective binder replacement in accordance Sec 401.



**Delete Sec 403.19.2 and substitute the following:**

**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 the maximum sublot size shall be 1,000 tons. The maximum lot size shall be 4,000 tons for determination of pay factors. 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](#).

**Delete Sec 106.9 and substitute the following:**

**106.9 Buy America Requirements**

Buy America Requirements are waived if the total amount of Federal financial assistance applied to the project, through awards or subawards, is below \$500,000.

**106.9.1 Buy America Requirements for Iron and Steel.**

On all federal-aid projects, the contractor's attention is directed to Title 23 CFR 635.410 *Buy America Requirements*. Where steel or iron products are to be permanently incorporated into the contract work, steel and iron material shall be manufactured, from the initial melting stage through the application of coatings, in the USA except for "minimal use" as described herein. Furthermore, any coating process of the steel or iron shall be performed in the USA. Under a general waiver from FHWA the use of pig iron and processed, pelletized, and reduced iron ore manufactured outside of the USA will be permitted in the domestic manufacturing process for steel or iron material.

**106.9.2 Buy America Requirements for Iron and Steel for Manufactured items.**

A manufactured item will be considered iron and steel if it is "predominantly" iron or steel. Predominantly iron or steel means that the cost of iron or steel content of a product is more than 50 percent of the total cost of all its components.

**106.9.2** Any sources other than the USA as defined will be considered foreign. The required domestic manufacturing process shall include formation of ingots and any subsequent process. Coatings shall include any surface finish that protects or adds value to the product.

**106.9.3** "Minimal use" of foreign steel, iron or coating processes will be permitted, provided the cost of such products does not exceed 1/10 of one percent (0.1 percent) of the total contract cost or \$2,500.00, whichever is greater. If foreign steel, iron, or coating processes are used, invoices to document the cost of the foreign portion, as delivered to the project, shall be provided and the engineer's written approval obtained prior to placing the material in any work.

**106.9.4** Buy America requirements include a step certification for all fabrication processes of all steel or iron materials that are accepted per Sec 1000. The AASHTO Product Evaluation and Audit Solutions compliance program verifies that all steel and iron products fabrication processes conform to 23 CFR 635.410 Buy America Requirements and is an acceptable standard per 23 CFR 635.410(d). AASHTO Product Evaluation and Audit Solutions compliant suppliers will not be required to submit step certification documentation with the shipment for some selected steel and iron materials. The AASHTO Product Evaluation and Audit Solutions compliant supplier shall maintain the step certification documentation on file and shall provide this documentation to the engineer upon request.

**106.9.4.1** Items designated as Category 1 will consist of steel girders, piling, and reinforcing steel installed on site. Category 1 items require supporting documentation prior to incorporation into the project showing all steps of manufacturing, including coating, as being completed in the United States and in accordance with CFR Title 23 Section 635.410 Buy America Requirements. This includes the Mill Test Report from the original producing steel mill and certifications documenting the manufacturing process for all subsequent fabrication, including coatings. The certification shall include language that certifies the following. That all steel and iron materials permanently incorporated in this project was procured and processed domestically and all manufacturing processes, including coating, as being completed in the United States and in accordance with CFR Title 23 Section 635.410.

**106.9.4.2** Items designated as Category 2 will include all other steel or iron products not in Category 1 and permanently incorporated in the project. Category 2 items shall consist of, but not be limited to items such as fencing, guardrail, signing, lighting and signal supports. The prime contractor is required to submit a material of origin form certification prior to incorporation into the project from the fabricator for each item that the product is domestic. The Certificate of Materials Origin form ([link to certificate form](#)) from the fabricator must show all steps of manufacturing, including coating, as being completed in the United States and in accordance with CFR Title 23 Section 635.410 Buy America Requirements and be signed by a fabricator representative. The engineer reserves the right to request additional information and documentation to verify that all Buy America requirements have been satisfied. These documents shall be submitted upon request by the engineer and retained for a period of 3 years after the last reimbursement of the material.

**106.9.4.3** Any minor miscellaneous steel or iron items that are not included in the materials specifications shall be certified by the prime contractor as being procured domestically. Examples of these items would be bolts for sign posts, anchorage inserts, etc. The certification shall read "I certify that all steel and iron materials permanently incorporated in this project during all manufacturing processes, including coating, as being completed in the United States and in accordance with CFR Title 23 Section 635.410 Buy America Requirements procured and processed domestically in accordance with CFR Title 23 Section 635.410 Buy America Requirements. Any foreign steel used was submitted and accepted under minor usage". The certification shall be signed by an authorized representative of the prime contractor.

**106.9.5** When permitted in the contract, alternate bids may be submitted for foreign steel and iron products. The award of the contract when alternate bids are permitted will be based on the lowest total bid of the contract based on furnishing domestic steel or iron products or 125 percent of the lowest total bid based on furnishing foreign steel or iron products. If foreign steel or iron products are awarded the contract, domestic steel or iron products may be used; however, payment will be at the contract unit price for foreign steel or iron products.

**106.9.6 Buy America Requirements for Construction Materials other than iron and steel materials.** Construction materials means articles, materials, or supplies that consist of only one of the items listed. Minor additions of articles, materials, supplies, or binding agents to a construction material do not change the categorization of the construction material. Upon request by the engineer, the contractor shall submit a domestic certification for all construction materials listed that are incorporated into the project.

- (a) Non-ferrous metals
- (b) Plastic and Polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables)
- (c) Glass (including optic glass)
- (d) Fiber optic cable (including drop cable)
- (e) Optical fiber
- (f) Lumber
- (g) Engineered wood
- (h) Drywall

**106.9.6.1 Minimal Use allowance for Construction Materials other than iron or steel.**

"The total value of the non-compliant products is no more than the lesser of \$1,000,000 or 5% of total applicable costs for the project." The contractor shall submit to the engineer any non-domestic materials and their total material cost to the engineer. The contractor and the engineer will both track these totals to assure that the minimal usage allowance is not exceeded.

**106.9.7 Buy America Requirements for Manufactured Products.**

Manufactured products means:

- (a) Articles, materials, or supplies that have been:
  - (i) Processed into a specific form and shape; or
  - (ii) Combined with other articles, materials, or supplies to create a product with different properties than the individual articles, materials, or supplies.
- (b) If an item is classified as an iron or steel product, a construction material, or a section 70917(c) material under § 184.4(e) and the definitions set forth in this section, then it is not a manufactured product. However, an article, material, or supply classified as a manufactured product under § 184.4(e) and paragraph (1) of this definition may include components that are construction materials, iron or steel products, or section 70917(c) materials.

**106.9.7.1** Manufactured products are exempt from Buy America requirements. To qualify as a manufactured product, items that consist of two or more of the listed construction materials that have been combined together through a manufacturing process, and items that include at least one of the listed materials combined with a material that is not listed through a manufacturing process, should be treated as manufactured products, rather than as construction materials.

**106.9.7.2** Manufactured items are covered under a general waiver to exclude them from Buy America Requirements. To qualify for the exemption the components must comprise of 55% of the value of materials in the item. The final assembly must also be performed domestically.

**CC. Railroad Requirements**

**1.0** The right of way of various Railroads, herein called "Railroad", are located within the limits of this project. However, this project has been developed with the specific intention that no involvement with the Railroad's facilities, traffic or right of way is required for the performance of the contractual work herein. The work to be performed over the Railroad's right of way shall not interfere with the Railroad's operations or facilities. Under these circumstances, the requirements of Sec 104.12.3, Sec 104.12.8 through 104.12.10.5 (inclusive), and Sec 107.13.4 shall not apply.

**2.0** Should the contractor violate this condition of no railroad involvement, all terms and conditions of the interaction with the Railroad shall be solely between the Railroad and the contractor.

**DD. Sign Removal Pay Item Details**

**1.0 Description.** This work shall consist of all labor, equipment, and materials to remove signposts, breakaway assemblies, signs, footings, and related appurtenances as specified in the job order or as directed by the engineer. All work shall comply with Sec 202 and 903 of the Missouri Standard Specifications for Highway construction; and Sec 903.02AP and 903.03BR of the Missouri Standard Plans for Highway Construction; and per the project plans and specifications.

**2.0 Construction Requirements.**

**2.1 Misc. Signpost Removal.** If the job order designates Signpost Removal the contractor shall remove the post, along with any material, hardware, or other items connected to the post as designated in the job order or as directed by the engineer. The work will include removing PSST, Round Pipe, U-Channel, or Wood Posts only.

**2.2 Misc. Concrete Sign Footing Removal.** If the engineer determines that an existing concrete footing is no longer needed or has been significantly damaged and needs to be replaced, the footing shall be removed as designated in the job order or as directed by the engineer. The work includes removing concrete footings used for PSST, Round Pipe, U-Channel, or Wood Posts only.

**2.3 Misc. Sign Removal.** If the engineer determines an existing sign has been significantly damaged and/or the damaged sign does not comply with current Commission standards or policies, the sign shall be removed as designated in the job order or as directed by the engineer. If the sign is to be reused, the contractor shall remove the sign by means and methods that will not damage the existing sign. A re-used sign will be considered a "Commission Furnished Sign". Removal of nuts, bolts, backing bars, or any other hardware is incidental to sign removal. The work includes removing signs from PSST, Round Pipe, U-Channel, or Wood Posts only.

**2.4 Misc. Sign Anchor or Stub Removal.** If a signpost is removed and the stub or anchor has been damaged or will no longer be used. The sub or anchor shall be removed as designated by the engineer. The work includes removing stubs and anchors without concrete footings for PSST, U-Channel, or Wood Posts only.

**3.0. Contractor Retained Materials.** Unless otherwise designated by the engineer to be reused or salvaged by the Commission, all materials removed shall become the property of the contractor and shall be removed from the right of way and properly disposed of.

#### **4.0 Method of Measurement and Basis of Payment.**

**4.1** The accepted quantity of removed signposts including hardware will be paid for at the contract unit price for:

Item 903-99.02          MISC. SIGNPOST REMOVAL per each

**4.1.1** Payment will be considered full compensation for all labor and equipment necessary to completely remove signpost.

**4.2** The accepted quantity of removed signs of various sizes including any incidental components will be paid for at the contract unit price for:

Item 903-99.02          MISC. SIGN REMOVAL per each

**4.2.1** Payment will be considered full compensation for all labor and equipment necessary to completely remove the sign.

**4.3** The accepted quantity of removed footings will be paid for at the contract unit price for:

Item 903-99.02          MISC. CONCRETE SIGNPOST FOOTING REMOVAL per each

**4.3.1** Payment will be considered full compensation for all labor, equipment, and incidental components necessary to completely remove the footing.

**4.4** The accepted quantity of removing Signpost Anchors or Stub Removal will be paid for at the contract unit price for:

Item 903-99.02          MISC. SIGNPOST ANCHOR OR STUB REMOVAL per each

**4.4.1** Payment will be considered full compensation for all labor, equipment, and material, other incidental items, necessary to remove the anchor or stub.

#### **EE. Sign Installation Pay Item Details (Contractor Furnished Materials)**

**1.0 Description.** The Work shall consist of all labor, equipment, hardware, and other materials required to install contractor provided signs, posts, anchors, stubs, breakaway assemblies, footings, and related appurtenances as specified in the job order or as directed by the engineer. All work shall comply with Sec 202 and 903 of the Missouri Standard Specifications for Highway construction; and Section 903.02AP and 903.03BR of the Missouri Standard Plans for Highway Construction; and per the project plans and specifications.

#### **2.0 Construction Requirements.**

**2.1 Misc. Concrete Footings Embedded.** If the Job order requires a concrete footing to be poured for a PSST or Round Pipe Post the contractor shall excavate and pour the footing as detailed in the plans or as directed by the engineer. Embedding of Anchors or Breakaway assemblies in the footing shall be incidental to the price of the footing. Embedded materials will be paid separately from the footing. In lieu of using Class B or B-1 Concrete, the contractor may use a pre-packaged dry commercial concrete mixture as described in section 903.3.1.2.1 of the Missouri Standard Specifications for Highway Construction. The details for concrete footings for

Round Pipe Posts and PSST posts can be found in section 903.3 of the 2023 Missouri Standard Plans for Highway Construction. Concrete Testing will not be required.

**2.2 Misc. Furnishing and Installing Break Away Assembly (Round Pipe Post).** If the job order designates a contract pay item for installing a new break away assembly for a round pipe post, the contractor shall furnish and place the assembly complete in place at the location designated by the engineer.

**2.3 Misc. Furnishing and Installing Break Away Assembly (PSST Post).** If the job order designates a contract pay item for installing a new break away assembly for a PSST Post, the contractor shall furnish and place the assembly complete in place at the location designated by the engineer.

**3.0 Misc. Furnishing and Installing Driven Anchor (PSST Post) – 7 GA.** If the job order designates a contract pay item for installing a new driven anchor for a PSST Post, the contractor shall furnish and place the assembly complete in place at the location designated by the engineer.

**3.1 Misc. Furnishing and Installing Concrete Post Anchor (PSST Post) – 7 GA.** If the job order designates a contract pay item for installing a new concrete post anchor for a PSST Post, the contractor shall furnish and place the assembly complete in place at the location designated by the engineer. Concrete will be paid separately.

**3.2 Misc. Furnishing and Installing Barrier Wall Anchor (PSST Post).** If the job order designates a contract pay item for installing a new Barrier Wall Anchor for a PSST Post, the contractor shall furnish and place the assembly complete in place at the location designated by the engineer.

**3.3 Misc. Furnishing and Installing 2 In. PSST Post – 12 GA.** If the job order designates a contract pay item for installing a new 2 inch PSST Post, the contractor shall furnish and place the post at the location designated by the engineer. The length of the Post may vary depending on field conditions.

**3.4 Misc. Furnishing and Installing 2.25 In. PSST Post insert (6 feet) – 12 GA.** If the job order requires the use of a 6 foot 2.25 inch PSST Post insert, the contractor shall furnish and place the post at the location designated by the engineer.

**3.5 Misc. Furnishing and Installing 2.5 In. PSST Post – 12 GA.** If the job order designates a contract pay item for installing a new 2.5 inch PSST Post, the contractor shall furnish and place the post at the location designated by the engineer. The length of the post may vary depending on field conditions.

**3.6 Misc. Furnishing and Installing Round Pipe Post.** If the job order designates a contract pay item for installing a new Round Pipe Post, the contractor shall furnish and place the post at the location designated by the engineer. The diameter of the pipe post may vary based on the size of the sign being mounted.

**3.7 Misc. Furnishing and Installing New Flat Sheet Sign.** If the job order designates a contract pay item for installing new flat sheet metal sign to a new or existing post, the contractor shall furnish and place the designated sign, backing bars, hardware, and any other materials required to properly install the sign. The new sign shall be installed at the location designated by the engineer. Sign sizes will vary.

**3.8 Misc. Furnishing and Installing New Fluorescent Flat Sheet Sign.** If the job order designates a contract pay item for installing new fluorescent flat sheet metal sign to a new or existing post, the contractor shall furnish and place the designated sign, backing bars, hardware, and any other materials required to properly install the sign. The new sign shall be installed at the location designated by the engineer. Sign sizes will vary.

#### **4.0 Method of Measurement and Basis of Payment**

**4.1** The accepted quantity of Misc. Concrete Footings Embedded will be paid for at the contract unit price for:

Item 903-99.02	Misc. Concrete Footings Embedded	Each
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**4.1.1** Payment will be considered full compensation for all material, labor, and equipment necessary to install the footing. Excavation for the footing is incidental.

**4.2** The accepted quantity of furnished and installed Break Away Assemblies for Round Pipe Posts will be paid for at the contract unit price for:

Item 903-99.02	Misc. Furnishing and Installing Break Away Assembly (Round Pipe Post) per each
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**4.2.1** Payment will be considered full compensation for all material, labor, and equipment necessary to install the Break Away Assembly.

**4.3** The accepted quantity of furnished and installed Break Away Assemblies for PSST Posts will be paid for at the contract unit price for:

Item 903-99.02	MISC. Furnishing and Installing Break Away Assembly (PSST Post) per each
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**4.3.1** Payment will be considered full compensation for all material, labor, equipment, and incidental items necessary to install the Break Away Assembly.

**4.4** The accepted quantity of furnishing and installing driven anchor for PSST Post will be paid for at the contract unit price for:

Item 903-99.02	Misc. Furnishing and Installing Driven Anchor (PSST Post)-7GA each
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**4.4.1** Payment will be considered full compensation for all labor, equipment, material, and other incidental items required to install the anchor.

**4.5** The accepted quantity of furnished and installed Concrete Post Anchor for PSST Posts will be paid for at the contract unit price for:

Item 903-99.02	Misc. Furnishing and Installing Concrete Post Anchor (PSST Post)-7GA each
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**4.5.1** Payment will be considered full compensation for all material, labor, and equipment necessary to install the Concrete Post Anchor.

**4.6** The accepted quantity of furnished and installed Barrier Wall Anchor (PSST Post) will be paid for at the contract unit price for:

Item 903-99.02 MISC. Furnishing and Installing Barrier Wall Anchor (PSST Post) each

**4.6.1** Payment will be considered full compensation for all material, labor, equipment, and incidental items necessary to install the Barrier Wall Anchor.

**4.7** The accepted quantity of furnished and installing 2 in. PSST Post will be paid for at the contract unit price for:

Item 903-99.02 Misc. Furnishing and Installing PSST Post-12GA per LF

**4.7.1** Payment will be considered full compensation for all labor, equipment, material, and other incidental items required to install the post to an anchor or break away assembly. The post shall be 12GA.

**4.8** The accepted quantity of furnished and installed 2.25 In. PSST Posts inserts will be paid for at the contract unit price for:

Item 903-99.02 Misc. Furnishing and Installing 2.25 In PSST Post Insert-12GA Each

**4.8.1** Payment will be considered full compensation for all material, labor, and equipment necessary to install the insert. The post shall be 12GA

**4.9** The accepted quantity of furnished and installed 2.5 In. PSST Posts will be paid for at the contract unit price for:

Item 903-99.02 Misc. Furnishing and Installing 2.5 In. PSST Post-12GA per LF

**4.9.1** Payment will be considered full compensation for all material, labor, equipment, and incidental items necessary to install the post to an anchor or break away assembly. The post shall be 12GA.

**4.10** The accepted quantity of furnished and installing Round Pipe Posts will be paid for at the contract unit price for:

Item 903-99.02 Misc. Furnishing and Installing Round Pipe Post per pound

**4.10.1** Payment will be considered full compensation for all labor, equipment, material, and other incidental items required to install the post to an anchor or break away assembly.

**4.11** The accepted quantity of furnished and installed flat sheet signs will be paid for at the contract unit price for:

Item 903-99.02 Misc. Furnishing and Installing Flat Sheet Sign per SQ FT

**4.11.1** Payment will be considered full compensation for all labor, equipment, hardware, materials, and other incidental items required to install the sign to the post.



**4.12** The accepted quantity of furnished and installed fluorescent flat sheet signs will be paid for at the contract unit price for:

Item 903-99.02 Misc. Furnishing and Installing Fluorescent Flat Sheet Sign per SQ FT

**4.12.1** Payment will be considered full compensation for all labor, equipment, hardware, materials, and other incidental items required to install the sign to the post.

FF. Sign Installation Pay Item Details (Commission Furnished Materials)

**1.0 Description.** The Work shall consist of installing Commission Furnished Sheet Metal Signs, Pipe Posts, or PSST Posts as specified in the job order or as directed by the engineer. Commission Furnished Materials may be installed to footings, anchors, or breakaway assemblies that are existing or newly installed by the contractor. All work shall comply with Sec 202 and 903 of the Missouri Standard Specifications for Highway construction; Sec 903.02AP and 903.03BR of the Missouri Standard Plans for Highway Construction; and per the project plans and specifications.

**2.0 Construction Requirements.**

**2.1 Misc. Installation of Commission Furnished Sheet Metal Sign.** If the Job order designates a pay item for the installation of commission furnished Sheet Metal Signs the contractor will only be supplied with the signs by the commission. All labor, equipment, nuts, bolts, straps, backer bars, or other materials required to mount the sign to the post will be supplied to the contractor and considered incidental.

**2.2 Misc. Installation of Commission Furnished Post to a Footing or Breakaway Assembly.** If the Job order designates a pay item for the installation of commission furnished posts, the contractor will only be supplied with the post by the commission. All labor, equipment, nuts, bolts, straps, backer bars, or other materials required to mount the sign to the post will be supplied to the contractor and considered incidental.

**2.3 Misc. Job Order Material Pick Up.** If the Job order designates that the contractor is to use commission furnished materials, then the contractor will be compensated to pick up the materials for the job orders. If the contractor is permitted to pick up materials for multiple job orders at the same time, the contractor will only be paid for 1 Material pick up. If not all the materials are available when the contractor arranges to pick up the materials, and the contractor is required to make additional trips to get all of the materials, then the contractor will be paid for each additional trip required to obtain all of the commission furnished materials. The contractor will be required to pick up materials from the following address unless other arrangements are made between the contractor and the engineer.

MoDOT Sign Shop  
3050 NE Independence Ave  
Lee's Summit. MO 64064

### **3.0 Method of Measurement and Basis of Payment**

**3.1** The accepted quantity of installed Commission Furnished Sheet Metal Signs will be paid for at the contract unit price for:

Item 903-99.02 Misc. Installation of Commission Furnished Sheet Metal Sign Each

**3.1.1** Payment will be considered full compensation for all material, labor, and equipment necessary to install the sign.

**3.2** The accepted quantity of installed Commission Furnished Posts will be paid for at the contract unit price for:

Item 903-99.02 Misc. Installation of Commission Furnished Post (PSST or Round Pipe Post) per each

**3.2.1** Payment will be considered full compensation for all material, labor, and equipment necessary to install the Post.

**3.3** The accepted quantity of Work Order Material Pick Ups will be paid for at the contract unit price for:

Item 903-99.02 MISC. Work Order Material Pick Up per each

**3.3.1** Payment will be considered full compensation for all material, labor, equipment, and incidental items necessary to pick up the signs from the designated location.

### **GG. Environmental Review Requirement**

**1.0 Description.** This project includes undetermined locations throughout the Kansas City District. This area of the state contains many sensitive species (including federally and state listed), protected streams, communities of conservation concern, and protected cultural and historic resources. It is the intent of this JSP, to maintain compliance with state and federal law. In order to achieve this goal, it is important to avoid negative impacts to any sensitive or protected resources that may be present, locations and impact of work must be reviewed by MoDOT Environmental and Historic Preservation Specialists before issuance of a Job Order.

**2.0 Restrictions.** The following restrictions will ensure that MoDOT adheres to all environmental regulations as required by federal law.

**2.1 Tree Clearing.** No tree clearing is permitted for any activity without prior coordination with MoDOT Environmental.

**2.2 Erosion Control.** Erosion control measures shall be implemented in order to reduce suspended solids, turbidity and downstream sedimentation that may enter the ecosystem of any cave, surface water, or ground water sink.

**2.3 Work Near Water Bodies** Work shall not be allowed below the ordinary high water elevation of any stream or lake. No work will be allowed in any wetlands. Personnel shall not drive or place any equipment in any waterway. Coordination with the Design - Environmental Section, and

Job No.: JKU0405

Route: Various

County: Various

permitting and consultation with regulatory agencies, is required prior to any proposed activity below ordinary high water elevation or within a wetland.

**3.0 Basis of Payment.** No direct pay shall be provided for any labor, equipment, time, or materials necessary to complete this work. The contractor shall have no claim, or basis for any claim or suit whatsoever, resulting from compliance with this provision.