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# JOB SPECIAL PROVISIONS TABLE OF CONTENTS (ROADWAY)

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# MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION 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: J2S3324 & J2S3326 SCOTLAND COUNTY, MO DATE PREPARED: 10/30/2023 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. <u>General - Federal</u> 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 <a href="https://www.modot.org">www.modot.org</a> 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 <a href="www.modot.org">www.modot.org</a> 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. <u>Contract Liquidated Damages</u> JSP-13-01C

- **1.0 Description.** Liquidated Damages for failure or delay in completing the work on time for this contract shall be in accordance with Sec 108.8. The liquidated damages include separate amounts for road user costs and contract administrative costs incurred by the Commission.
- **2.0 Period of Performance.** Prosecution of work is expected to begin on the date specified below in accordance with Sec 108.2. Regardless of when the work is begun on this contract, all work on all projects (job numbers) shall be completed on or before the Contract Completion date specified below. Completion by this date shall be in accordance with the requirements of Sec 108.7.1.

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Notice to Proceed Date: March 11, 2024 Contract Completion Date: November 1, 2024

**2.1 Calendar Days.** The count of calendar days will begin on the date the contractor starts any construction operations on the project.

| Job Number | Calendar Days | Daily Road User Cost |
|------------|---------------|----------------------|
| J2S3324    | 60            | \$1,800              |
| J2S3326    | 70            | \$1,800              |

- **3.0** Liquidated Damages for Contract Administrative Costs. Should the contractor fail to complete the work on or before the contract completion date specified in Section 2.0, or within the number of calendar days specified in Section 2.1, whichever occurs first, the contractor will be charged contract administrative liquidated damages in accordance with Sec 108.8 in the amount of \$500 per calendar day for each calendar day, or partial day thereof, that the work is not fully completed. For projects in combination, these damages will be charged in full for failure to complete one or more projects within the above specified contract completion date or calendar days.
- **4.0 Liquidated Damages for Road User Costs.** Should the contractor fail to complete the work on or before the contract completion date specified in Section 2.0, or within the number of calendar days specified in Section 2.1, whichever occurs first, the contractor will be charged road user costs in accordance with Sec 108.8 in the amount specified in Section 2.1 for each calendar day, or partial day thereof, that the work is not fully completed. These damages are in addition to the contract administrative damages and any other damages as specified elsewhere in this contract.
- C. Work Zone Traffic Management JSP-02-06N
- **1.0 Description.** 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.
- 1.1 Maintaining Work Zones and Work Zone Reviews. The Work Zone Specialist (WZS) shall maintain work zones in accordance with Sec 616.3.3 and as further stated herein. The WZS shall coordinate and implement any changes approved by the engineer. The WZS shall ensure all traffic control devices are maintained in accordance with Sec 616, the work zone is operated within the hours specified by the engineer, and will not deviate from the specified hours without prior approval of the engineer. The WZS is responsible to manage work zone delay in accordance with these project provisions. When requested by the engineer, the WZS shall submit a weekly report that includes a review of work zone operations for the week. The report shall identify any problems encountered and corrective actions taken. Work zones are subject to unannounced inspections by the engineer and other departmental staff to corroborate the validity of the WZS's review and may require immediate corrective measures and/or additional work zone monitoring.
- **1.2 Work Zone Deficiencies.** Failure to make corrections on time may result in the engineer suspending work. The suspension will be non-excusable and non-compensable regardless if road user costs are being charged for closures.

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## 2.0 Traffic Management Schedule.

**2.1** Traffic management schedules shall be submitted to the engineer for review prior to the start of work and prior to any revisions to the traffic management schedule. The traffic management schedule shall include the proposed traffic control measures, the hours traffic control will be in place, and work hours.

- **2.2** The traffic management schedule shall conform to the limitations specified in Sec 616 regarding lane closures, traffic shifts, road closures and other width, height and weight restrictions.
- **2.3** The engineer shall be notified as soon as practical of any postponement due to weather, material or other circumstances.
- **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 construction and the contractor is prepared to diligently pursue the work until the closed lane is opened to traffic.
- 2.5 Traffic Congestion. The contractor shall, upon approval of the engineer, take proactive measures to reduce traffic congestion in the work zone. The contractor shall immediately implement appropriate mitigation strategies whenever traffic congestion reaches an excess of 10 minutes to prevent congestion from escalating to 15 minute or above threshold. If disruption of the traffic flow occurs and traffic is backed up in queues of 15 minute delays or longer, then the contractor shall immediately review the construction operations which contributed directly to disruption of the traffic flow and make adjustments to the operations to prevent the queues from reoccurring. Traffic delays may be monitored by physical presence on site or by utilizing real-time travel data through the work zone that generate text and/or email notifications where available. The engineer monitoring the work zone may also notify the contractor of delays that require prompt mitigation. The contractor may work with the engineer to determine what other alternative solutions or time periods would be acceptable.

## 2.5.1 Traffic Safety.

- **2.5.1.1 Recurring Congestion.** Where traffic queues routinely extend to within 1000 feet of the ROAD WORK AHEAD, or similar, sign on a divided highway or to within 500 feet 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.
- **2.5.1.2 Non-Recurring Congestion.** When traffic queues extend to within 1000 feet of the ROAD WORK AHEAD, or similar, sign on a divided highway or to within 500 feet of the ROAD WORK AHEAD, or similar, sign on an undivided highway infrequently, 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 and no more than 0.5 mile in advance of the end of the traffic queue on divided highways and no less than 500 feet and no more than 0.5 mile in advance of the end of the traffic queue on undivided highways.

## 3.0 Work Hour Restrictions.

**3.1** Except for emergency work, as determined by the engineer, and long term lane closures required by project phasing, all lanes shall be scheduled to be open to traffic during the five major

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holiday periods shown below, from 12:00 noon on the last working day preceding the holiday until 6:00 a.m. on the first working day subsequent to the holiday unless otherwise approved by the engineer.

Memorial Day Labor Day Thanksgiving Christmas New Year's Day

**3.1.1 Independence Day.** The lane restrictions specified in Section 3.1 shall also apply to Independence Day, except that the restricted periods shall be as follows:

| When Independence Day falls on: | The Holiday is Observed on: | Halt Lane Closures<br>beginning at: | Allow Lane Closures to resume at: |
|---------------------------------|-----------------------------|-------------------------------------|-----------------------------------|
| Sunday                          | Monday                      | Noon on Friday                      | 6:00 a.m. on Tuesday              |
| Monday                          | Monday                      | Noon on Friday                      | 6:00 a.m. on Tuesday              |
| Tuesday                         | Tuesday                     | Noon on Monday                      | 6:00 a.m. on Wednesday            |
| Wednesday                       | Wednesday                   | Noon on Tuesday                     | 6:00 a.m. on Thursday             |
| Thursday                        | Thursday                    | Noon on Wednesday                   | 6:00 a.m. on Friday               |
| Friday                          | Friday                      | Noon on Thursday                    | 6:00 a.m. on Monday               |
| Saturday                        | Friday                      | Noon on Thursday                    | 6:00 a.m. on Monday               |

- **3.2** The contractor shall not perform any construction operation on the roadway, roadbed or active lanes, including the hauling of material within the project limits, during restricted periods, holiday periods or other special events specified in the contract documents.
- **3.3** Disregard Item 3.1 and 3.2 for Road Closed projects.
- **3.4** The pre-closure notification signs shown on the Traffic Control plan sheets shall be installed a minimum of 2 weeks prior to the planned closure of roadway. The date of closure displayed on the sign must be maintained if planned closure is delayed.
- **4.0 Basis of Payment.** No direct payment will be made to the contractor to recover the cost of equipment, labor, materials, or time required to fulfill the above provisions, unless specified elsewhere in the contract document. All authorized changes in the traffic control plan shall be provided for as specified in Sec 616.

## D. Emergency Provisions and Incident Management JSP-90-11A

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

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

| Missouri Highway Patrol Troop B (660) 385-2132 |
|--|
| Scotland County Sheriff (660) 465-2106         |
| Scotland County Ambulance (660) 465-2111       |
| Scotland County Fire Department (660) 465-2121 |

- **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 law enforcement agency.
- **2.2** The contractor shall notify law 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 law 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.

# E. Project Contact for Contractor/Bidder Questions JSP-96-05

All questions concerning this project during the bidding process shall be forwarded to the project contact listed below.

Kimberly Trainor, Project Contact Northeast District 1711 S. Highway 61 Hannibal, MO 63401

Telephone Number: 573-231-2786 Email: kimberly.trainor@modot.mo.gov

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

## F. Supplemental Revisions JSP-18-01AA

Compliance with <u>2 CFR 200.216 – Prohibition on Certain Telecommunications and Video Surveillance Services or Equipment.</u>

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

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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;

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(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 webbased 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

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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:

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| Table 1 – GTR Material Properties |             |                   |  |
|-----------------------------------|-------------|-------------------|--|
| Property                          | Test Method | Criteria          |  |
| Specific Gravity                  | ASTM D1817  | 1.02 to 1.20      |  |
| Metal Contaminates                | ASTM D5603  | <u>&lt;</u> 0.01% |  |
| Fiber Content                     | ASTM D5603  | <u>&lt;</u> 0.5%  |  |
| Moisture Content                  | ASTM D1509  | <u>&lt;</u> 1.0%* |  |
| Mineral Filler                    | AASHTO M17  | <u>&lt;</u> 4.0%  |  |

<sup>\*</sup>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.

| Table 2 – GTR Gradation        |        |  |
|--------------------------------|--------|--|
| Sieve Percent Passing by Weigl |        |  |
| 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 ± 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 ± 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.

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**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<sub>sb</sub> 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<sub>se</sub> shall be calculated as follows:

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

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## 8.5 Pbe 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<br>Grade | Percent Effective Virgin Binder<br>Replacement Limits | Required Virgin<br>Binder Grade | Minimum GTR<br>Dosage Rate |
|--------------------------|---|---------------------------------|----------------------------|
| PG 76-22                 | 0 - 20  | PG 70-22                        | 5 %                        |
| PG 76-22                 | 0 - 20  | PG 64-22                        | 10 %                       |
| PG 70-22                 | 0 20  | PG 64-22                        | 5 %                        |
| PG 70-22                 | 0 - 30  | PG 58-28                        | 10 %                       |
| PG 64-22                 | 0 – 40*   | PG 58-28                        | 5 %                        |
| PG 04-22                 | 0 – 40  | PG 52-34                        | 10 %                       |
| PG 58-28 0 – 40*         | 0 40*   | PG 52-34                        | 5 %                        |
|                          | U – 4U*   | PG 46-34                        | 10 %                       |

<sup>\*</sup> 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,

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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 (<u>link to certificate form</u>) 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

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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.

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(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.

# G. <u>Utilities – J2S3324</u> JSP-93-26F

**1.0** For informational purposes only, the following is a list of names, addresses, and telephone numbers of the <u>known</u> utility companies in the area of the construction work for this improvement:

| <u>Utility Name</u>  | Known<br>Required<br>Adjustment | <u>Type</u> |
|--|---------------------------------|-------------|
| Ameren Missouri Electric<br>204 W. Cottonwood St.<br>Kirksville, MO 63501<br>Phone: (660) 785-2705 | None                            | Power       |
| Pat McCarty<br>Phone: (660) 785-2730<br>Email: pmccarty@ameren.com                                 |                                 |             |
| Kirk Ranson<br>Phone: (660) 956-3318 - cell<br>Email: kranson@ameren.com                           |                                 |             |

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| Holly Energy Partners 26036 Old Highway 24 Carrollton, MO 64633 Phone: (660) 542-0206  Mark England Pipeline Operations North Manager Phone: (660) 322-8657 Email: mark.england@hollyenergy.com  Rob Smith Field Operations Phone: (660) 322-8609 Email: robert.smith@hollyenergy.com | None<br>Section 2.1 | Pipeline       |
|---|---------------------|----------------|
| Lewis County Rural Electric Cooperative Terry O'Brien PO Box 68 Lewistown, MO 63452 Phone: (573) 215-4000 Email: tobrien@lewiscountyrec.org   | None                | Power          |
| Northeast Missouri Rural Telephone Kyle Rogers 718 South West Street Green City, MO 63545 Phone: (660) 874-4111 Email: krogers@nemr.net   | None                | Communications |
| CPWSD #1 of Scotland County Josh McSparren P.O. Box 166 Memphis, MO 63555 Phone: (660) 465-7200 Phone: (660) 341-4663 – cell Email: josh.mcsparren@yahoo.com  | None                | Water          |

**1.1** The existence and approximate location of utility facilities known to exist, as shown on the plans, are based upon the best information available to the Commission at this time. This information is provided by the Commission "as-is" and the Commission expressly disclaims any representation or warranty as to the completeness, accuracy, or suitability of the information for any use. Reliance upon this information is done at the risk and peril of the user, and the Commission shall not be liable for any damages that may arise from any error in the information. It is, therefore, the responsibility of the contractor to verify the above listing information indicating existence, location and status of any facility. Such verification includes direct contact with the listed utilities.

## **2.0** Project Specific Provisions:

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**2.1 Holly Energy Partners** - has a steel 8-inch diameter refined products pipeline cased in a 12-inch steel casing. Facility crosses Route A at approximate Log Mile 0.315, approximately 92 feet to the east of the existing bridge over the BNSF railroad, near Rutledge, MO. Depth to the top of steel casing is approximately 9 feet deep at the existing guardrail locations. Proposed guardrail work is planned to be within the limits of the pipeline, but no conflicts are anticipated. The contractor shall plan to coordinate with Holly Energy Partners staff and any work within 25 feet of the pipeline requires Holly Energy Partners staff to be present during the work. Contractors shall use caution when working near these facilities and request a MOCS ticket prior to any work at this location. Contractors shall contact Rob Smith, Holly Energy Partners (660) 322-8609, prior to any guardrail or grading operations to ensure contractor operations will not affect their facilities.

## H. Utilities – J2S3326 JSP-93-26F

**1.0** For informational purposes only, the following is a list of names, addresses, and telephone numbers of the known utility companies in the area of the construction work for this improvement:

| <u>Utility Name</u>  | Known<br>Required<br>Adjustment | <u>Type</u>    |
|--|---------------------------------|----------------|
| Northeast Missouri Rural Telephone Kyle Rogers 718 South West Street Green City, MO 63545 Phone: (660) 874-4111 Email: krogers@nemr.net  | None                            | Communications |
| CPWSD #1 of Scotland County Josh McSparren P.O. Box 166 Memphis, MO 63555 Phone: (660) 465-7200 Phone: (660) 341-4663 – cell Email: josh.mcsparren@yahoo.com   | None                            | Water          |
| Tri-County Electric Cooperative Larry Weaver P.O. Box 159 16894 US Hwy 63 Lancaster, MO 63548 Phone: (660) 457-3733 Phone: (660) 216-9773 - cell Email: <a href="mailto:lweaver@tricountyelectric.org">lweaver@tricountyelectric.org</a> | None                            | Power          |

**1.1** The existence and approximate location of utility facilities known to exist, as shown on the plans, are based upon the best information available to the Commission at this time. This information is provided by the Commission "as-is" and the Commission expressly disclaims any representation or warranty as to the completeness, accuracy, or suitability of the information for

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any use. Reliance upon this information is done at the risk and peril of the user, and the Commission shall not be liable for any damages that may arise from any error in the information. It is, therefore, the responsibility of the contractor to verify the above listing information indicating existence, location and status of any facility. Such verification includes direct contact with the listed utilities.

# I. <u>Liquidated Damages for Winter Months</u> JSP-04-17A

Delete Sec 108.8.1.3 (a)

Liquidated damages for failure to complete the work on time shall not be waived from December 15 to March 15, both dates inclusive.

- J. Contractor Quality Control NJSP-15-42
- **1.0** The contractor shall perform Quality Control (QC) testing in accordance with the specifications and as specified herein. The contractor shall submit a Quality Control Plan (QC Plan) to the engineer for approval that includes all items listed in Section 2.0, prior to beginning work.

#### 2.0 Quality Control Plan.

- (a) The name and contact information of the person in responsible charge of the QC testing.
- (b) A list of the QC technicians who will perform testing on the project, including the fields in which they are certified to perform testing.
- (c) A proposed independent third party testing firm for dispute resolution, including all contact information.
- (d) A list of Hold Points, when specified by the engineer.
- (e) The MoDOT Standard Inspection and Testing Plan (ITP). This shall be the version that is posted at the time of bid on the MoDOT website (<a href="www.modot.org/quality">www.modot.org/quality</a>).
- **3.0 Quality Control Testing and Reporting.** Testing shall be performed per the test method and frequency specified in the ITP. All personnel who perform sampling or testing shall be certified in the MoDOT Technician Certification Program for each test that they perform.
- **3.1 Reporting of Test Results.** All QC test reports shall be submitted as soon as practical, but no later than the day following the test. Test data shall be immediately provided to the engineer upon request at any time, including prior to the submission of the test report. No payment will be made for the work performed until acceptable QC test results have been received by the engineer and confirmed by QA test results.
- **3.1.1** Test results shall be reported on electronic forms provided by MoDOT. Forms and Contractor Reporting Excel2Oracle Reports (CRE2O) can be found on the MoDOT website. All required forms, reports and material certifications shall be uploaded to a Microsoft SharePoint® site provided by MoDOT, and organized in the file structure established by MoDOT.
- **3.2 Non-Conformance Reporting.** A Non-Conformance Report (NCR) shall be submitted by the contractor when the contractor proposes to incorporate material into the work that does not

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meet the testing requirements or for any work that does not comply with the contract terms or specifications.

- **3.2.1** Non-Conformance Reporting shall be submitted electronically on the Non-Conformance Report form provided on the MoDOT Website. The NCR shall be uploaded to the MoDOT SharePoint® site and an email notification sent to the engineer.
- **3.2.2** The contractor shall propose a resolution to the non-conforming material or work. Acceptance of a resolution by the engineer is required before closure of the non-conformance report.

## 4.0 Work Planning and Scheduling.

- **4.1 Two-week Schedule**. Each week, the contractor shall submit to the engineer a schedule that outlines the planned project activities for the following two-week period. The two-week schedule shall detail all work and traffic control events planned for that period and any Hold Points specified by the engineer.
- **4.2 Weekly Meeting.** When work is active, the contractor shall hold a weekly project meeting with the engineer to review the planned activities for the following week and to resolve any outstanding issues. Attendees shall include the engineer, the contractor superintendent or project manager and any foreman leading major activities. This meeting may be waived when, in the opinion of the engineer, a meeting is not necessary. Attendees may join the meeting in person, by phone or video conference.
- **4.3 Pre-Activity Meeting.** A pre-activity meeting is required in advance of the start of each new activity, except when waived by the engineer. The purpose of this meeting is to review construction details of the new activity. At a minimum, the discussion topics shall include: safety precautions, QC testing, traffic impacts, and any required Hold Points. Attendees shall include the engineer, the contractor superintendent and the foreman who will be leading the new activity. Pre-activity meetings may be held in conjunction with the weekly project meeting.
- **4.4 Hold Points.** Hold Points are events that require approval by the engineer prior to continuation of work. Hold Points occur at definable stages of work when, in the opinion of the engineer, a review of the preceding work is necessary before continuation to the next stage.
- **4.4.1** A list of typical Hold Point events is available on the MoDOT website. Use of the Hold Point process will only be required for the project-specific list of Hold Points, if any, that the engineer submits to the contractor in advance of the work. The engineer may make changes to the Hold Point list at any time.
- **4.4.2** Prior to all Hold Point inspections, the contractor shall verify the work has been completed in accordance with the contract and specifications. If the engineer identifies any corrective actions needed during a Hold Point inspection, the corrections shall be completed prior to continuing work. The engineer may require a new Hold Point to be scheduled if the corrections require a follow-up inspection. Re-scheduling of Hold Points require a minimum 24-hour advance notification from the contractor unless otherwise allowed by the engineer.
- **5.0 Quality Assurance Testing and Inspection.** MoDOT will perform quality assurance testing and inspection of the work, except as specified herein. The contractor shall utilize the inspection

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checklists provided in the ITP as a guide to minimize findings by MoDOT inspection staff. Submittal of completed checklists is not required, except as specified in 5.1.

- **5.1** Inspection and testing required in the production of concrete for the project shall be the responsibility of the contractor. Submittal of the 501 Concrete Plant Checklist is required.
- **6.0 Basis of Payment.** No direct payment will be made for compliance with this provision.
- K. <u>Slurry and Residue Produced During Surface Treatment of PCCP and Bridge Decks</u> JSP-06-05A
- **1.1 Description.** This work covers the requirements for controlling residue or slurry produced by milling, grinding, planing, grooving or other methods of surface treatments on new or existing PCCP and bridge decks in addition to Section 622.
- **2.0 Construction Requirements.** The following shall be considered the minimum requirements for performing this work within the project limits.
- **2.1** The contractor shall submit to the Engineer for approval in writing prior to the preconstruction meeting, the best management practices (BMP's) to be used to protect the environment, including the method of disposal of the residue whether on right of way or off-site.
- **2.2** When slurry is dispersed on the right of way, BMP's shall be installed to keep slurry or residue from entering paved ditches or structures discharging within the areas restricted by Section 622.303.8.6, from entering any waterways or from leaving the right of way.
- **2.3** Upon approval of the contractor's BMP and residue disposal plan and prior to the contractor beginning surface treatment operations, the Engineer will identify slurry or residue "no discharge zones".
- **2.4** Operations may be suspended by the Engineer during periods of rainfall or during freezing temperatures.
- **3.0 Basis of Payment.** No direct payment for slurry or residue control requirements for BMP's will be made. Compliance with this specification along with the cost of all materials, labor and equipment necessary for the surface treatment work shall be included in and completely covered by the unit price bid for each of the items of work for surface treatment included in contract.
- L. Removal and Delivery of Existing Signs JSP-12-01C
- **1.0 Description**. All Commission-owned signs removed from the project shall be disassembled, stored, transported, and disposed of as specified herein. Sign supports, structures and hardware removed from the project shall become the property of the contractor.
- 2.0 Disassembly and Delivery.
- **2.1** All Commission-owned signs, (excluding abandoned billboard signs), designated for removal in the plans, or any other signs designated by the Engineer, shall be removed from the sign

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supports and structures, disassembled, stored, transported, and delivered by the contractor to the recycling center for destruction.

- **2.2** The contractor shall coordinate and make arrangements with the recycling center for delivery of the signs. Sign panels shall be disassembled and/or cut into sizes as required by the recycling center.
- **2.3** The contractor shall provide the Engineer with a "Sign Delivery Certification" attesting to completion of delivery of all existing sign material from the project to the recycler. In addition, the contractor shall provide to the Engineer a final "Sign Certification of Destruction" from the recycler that documents the total pounds of scrap sign material received from the project and attests that all such material will not be re-purposed and will be destroyed in a recycling process. The contractor can locate the required certification statements from the Missouri Department of Transportation website:

## https://www.modot.org/forms-contractor-use

- **2.4** Funds received from the disposal of the signs from the recycling center shall be retained by the Contractor.
- **3.0 Basis of Payment.** All costs associated with removing, disassembling and/or cutting, storing, transporting, and disposing of signs shall be considered as completely covered by the contract unit price for Item No. 202-20.10, "Removal of Improvements", per lump sum.

## M. Guardrail Grading Requirements JSP-17-02B

- **1.0 Description.** Guardrail installation and grading shall be in accordance with Missouri Standard Specifications for Highway Construction, Missouri Standard Plans for Highway Construction, and as described herein.
- **2.0 Construction Requirements.** When guardrail and/or end treatment removal and replacement requires grading of the shoulder and/or slopes, Section 606.3.1(b), (c), and 606.3.1.1 of the Missouri Standard Specifications shall be waived and the following shall apply:
  - a) Along roadways and shoulders, remove no more guardrail than can be reconstructed within seven (7) calendar days, including weekends and holidays. The seven day counting period shall start when the first piece of safety hardware is removed.
  - b) The active work zone area that encompasses the guardrail and/or end treatment reconstruction, shall not exceed one (1) mile in length. The contractor shall be required to provide and maintain approved channelizing devices adjacent to the reconstruction area.
  - c) Only one-side of the roadway shall be worked on at the same time. Divided facilities shall be limited to work on one-side of each direction at the same time.
  - d) When the removal of any existing safety hardware device exposes non-breakaway obstacles, the reconstruction of the safety hardware device protecting the obstacle shall be replaced within 48 hours of removal or an approved temporary crashworthy device shall be provided, installed and maintained at the contractor's expense until the non-

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breakaway obstacle is permanently protected. The 48 hour counting period shall start when the first piece of safety hardware is removed.

- e) Areas where guardrail and/or end treatments have been removed, but not yet replaced, shall be delineated in accordance with plans or as directed by the Engineer.
- **3.0 Non-Compliance.** Non-compliance with this provision shall result in the immediate suspension of work in accordance with Sec 105.1.2. No work, including but not limited to additional guardrail removal and grading, shall be allowed to proceed except for work necessary to restore guardrail installation.
- **4.0 Basis of Payment.** No direct payment will be made for compliance with this provision. Guardrail items, grading, and temporary traffic control devices will be paid for as provided in the contract.

## N. Permanent Aggregate Edge Treatment NJSP-15-40B

- **1.0 Description.** This work shall consist of furnishing and installing a permanent aggregate edge treatment along the edge of shoulder or pavement as shown on the plans or as directed by the engineer.
- **2.0 Construction Requirements.** Aggregate shall be simultaneously deposited and spread on the sub-grade and shall not be deposited on the pavement or shoulder and bladed into place. Aggregate material shall be shaped according to the typical section and compacted until there is no visible evidence of further consolidation.
- **3.0 Material Requirements.** Material used for the aggregate edge treatment shall be Type 1, 5, or 7 Aggregate in accordance with Sec 1007 or an allowable substitute approved by the engineer. Bituminous cold millings meeting the gradation for Type 1, 5 or 7 Aggregate may be used in lieu of aggregate. Limestone screenings or other material with excessive fines will not be allowed. Material will be accepted based on certification in lieu of testing contingent upon satisfactory results being obtained in the field.
- **4.0 Measurement by Weight.** Measurement of the aggregate edge treatment material shall be per ton and in accordance with Sec 310.5.3.
- **5.0 Basis of Payment.** The accepted quantities of aggregate edge treatment will be paid for at the contract unit price for 304-99.10, Permanent Aggregate Edge Treatment, per ton and will be full compensation for all labor, equipment and material to complete the described work. No fuel adjustment will be made for Permanent Aggregate Edge Treatment.
- Special Provisions for Protection of BNSF Railway Company Interests J2S3324

#### DOT# 005046F MP 282.13 Marceline Sub in Rutledge, MO.

To Report an Emergency on the railroad call: (800) 832-5452 Scotland County Route A, MoDOT bridge A2740, US DOT# 005046F MP 282.31 Marceline Sub in Rutledge, MO

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## 1.0 Authority of Railroad Engineer and Commission's Representative.

**1.1** The authorized representative of BNSF Railway Company, herein called "Railroad Engineer", shall have final authority in all matters affecting the safe maintenance and operation of railroad traffic including the adequacy of the foundations and structures supporting the railroad tracks.

- **1.2** The authorized representative of the Missouri Highways and Transportation Commission, herein called "Engineer", shall have authority over all other matters as prescribed herein and in the project specifications.
- **1.3** The Contractor must adhere to all other BNSF Railway policies and procedures not specifically mentioned in these special provisions. These can be found at <a href="http://www.bnsf.com/in-the-community/public-projects/index.page">http://www.bnsf.com/in-the-community/public-projects/index.page</a>.

# 2.0 Contractor's indemnity Obligations to the Railroad.

- **2.1** The term "contractor" as used in this special provision includes any and all subcontractors. The contractor shall indemnify, defend and hold harmless the Railroad from and against any and all loss, damage, claims, demands, causes of action, costs and expenses of whatsoever nature arising out of injury to or death of persons whomsoever, or out of damage to or destruction of property whatsoever, including, without limitation, damage to fiber optic, communication and other cable lines and systems, where such injury, death, damage or destruction results from any cause arising out of work performed by the contractor pursuant to the agreement between Railroad and the Commission for the project, and shall also release the Railroad from and shall waive any claims for injury or damage to equipment or other property, which may result from the construction, maintenance and operation of railroad tracks, wire lines, fiber optic cable, pipe lines and other facilities on said right of way of the Railroad by the contractor. THE LIABILITY ASSUMED BY THE CONTRACTOR WILL NOT BE AFFECTED BY THE FACT, IF IT IS A FACT, THAT THE DAMAGE, DESTRUCTION, INJURY, DEATH, CAUSE OF ACTION OR CLAIM WAS OCCASIONED BY OR CONTRIBUTED TO BY THE NEGLIGENCE OF THE RAILROAD, THE RAILROAD'S AGENTS, SERVANTS, EMPLOYEES OR OTHERWISE, EXCEPT TO THE EXTENT THAT SUCH CLAIMS ARE PROVEN BY ANY CLAIMANT TO HAVE BEEN PROXIMATELY CAUSED BY THE INTENTIONAL MISCONDUCT OR SOLE OR GROSS NEGLIGENCE OF THE RAILROAD. The contractor's indemnity shall include loss of profits or revenue arising from damage or destruction to fiber optic, communication and other cable lines and systems.
- **2.2** In addition to the indemnity obligations contained in the preceding paragraph, the contractor shall indemnify, defend and hold harmless the Railroad from any claims, expenses, costs, actions, demands, losses, fines, penalties, and fees, of whatsoever nature arising from, related to or connected, in whole or in part, with the following:
  - (a) The removal of the contractor's agents, servants, employees or invitees from the Railroad's property for safety reasons.
  - (b) Contractor's compliance or failure to comply with the provision of applicable law in connection with the performance of contractor's work.

#### 3.0 Notice of Starting Work.

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**3.1** The contractor shall not commence any work on Railroad's right of way until the contractor has complied with the following conditions:

(a) At least 30 days in advance of the date the contractor proposes to begin work on Railroad's right of way, the contractor shall give the Railroad written notice to the address below with copy to the Engineer who has been designated to be in charge of the work.

Ms. Kara Brockamp
Manager of Public Projects
BNSF Railway
4515 Kansas Ave. Building 4B, 3<sup>rd</sup> Floor
Kansas City, KS 66106
913-551-4484
Kara.brockamp@bnsf.com

- (b) Obtain written or electronic authorization from the Railroad to begin work on the Railroad's right of way, such authorization to include an outline of specific conditions with which contractor shall comply.
- (c) Obtain the insurance coverage required in Section 14.0 of this job special provision. Contractor shall submit written evidence of such coverage to Railroad prior to commencing any work.
- (d) Prior to performing any work on Railroad's property, right –of way or in an area that may impact Railroad's operations, the contractor's employees, representatives or agents who are regularly assigned to perform work on the project shall complete the safety orientation training available on the internet at www.contractororientation.com, hereinafter called, "Internet Safety Orientation". If the contractor's employee, representative or agent is not regularly assigned to perform work on the project, hereinafter called "Flexible Worker(s)", the contractor shall ensure that any Flexible Worker receives appropriate safety training prior to performing any work on the Railroad's property, right –of way or in an area that may impact the Railroad's operations. The content of safety training for Flexible Workers shall include the information covered in the Internet Safety Orientation. The approximate cost of the Internet Safety Orientation is \$11 per person, subject to annual escalation.
- **3.2** The Railroad's written authorization to proceed with the work, with a copy to the Engineer, will include the names, addresses and telephone numbers of the Railroad's representatives who are to be notified as hereinafter required. Where more than one representative is designated, the area of responsibility of each representative shall be specified.

## 4.0 Submittals and Actions Required During Construction Phase:

- **4.1** The Agency shall be the main contact for BNSF throughout the project. Agency shall be included on all correspondence relating to BNSF. **BNSF will NOT accept submittals directly from the Agency's Contractor.**
- **4.2** BNSF will hire a consultant team to perform the duties of an Inspector/Coordinator, (I/C) on behalf of BNSF for the duration of the field construction of the project. The cost of the I/C will be reimbursable to BNSF by the Agency or their Contractor.

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BNSF requires the I/C team be involved in the project throughout the construction phase to represent BNSF.

The I/C has authority to remove a contractor's employee from BNSF property if that employee fails to comply with the BNSF safety policy, does not have proper PPE or otherwise ignores instructions regarding work on BNSF right-of-way. The I/C has authority to shut down work on BNSF right-of-way if the contractor works in a manner that is in violation of BNSF's safety policy or FRA regulations. Anytime instructions to the contractor by BNSF or the I/C are not complied with, the project may be shut down. All equipment and personnel will be removed from BNSF property until issues causing the shutdown are resolved to BNSF's satisfaction.

**4.3** Agency must hold a pre-construction meeting with contractor and BNSF prior to work beginning on BNSF property.

The Pre-Construction meeting shall not be held until 30 days after I/C has been selected – this allows time for the I/C to become familiar with the project.

Recommend scheduling two weeks prior to construction commencing to allow for adjustment to work plans, if needed.

**4.4** Required Construction Submittals: (Allow for 4 weeks for BNSF to review submittals)

All submittals should flow from the Contractor to the Agency, to the I/C Consultant, to the BNSF Project Engineer, (PE), and to BNSF Structures with responses back through the same communication chain. **BNSF will not accept submittals directly from the Contractor.** 

Any changes to the work governed by a submittal requires that the submittal be re-accepted by BNSF before the work commences.

Examples of construction submittals required include but are not limited to:

Contractors Safety Action Plan, Fire Prevention Plan, Proposed Project Schedule, Demolition, Shoring, Falsework and Lifting of Materials.

The following submittals will require a Professional Engineer, (PE) stamp: Critical Pick Plan (75% of capacity of crane, or multi-crane pick)

Lifted Material Plan (Placement or Removal) – When lift is within temporary construction clearances and when lift is within 25' of the centerline of the nearest track

Demolition Plan Temporary Shoring Plan

Bracing Design Plan (non-standard only per DOT)

For overpasses, Agency shall submit as-built plans of the structure, including final clearance dimensions to the I/C. Vertical clearance must be measured from the Top of Rail, horizontal clearance must be measured from the nearest track centerline.

**OPERATIONALLY CRITICAL WORK AND SUBMITTALS:** (4 to 6 weeks review timeline) <u>All OC</u> work requires a submittal and acceptance by BNSF.

Operationally Critical (OC) submittals are those that have the potential to affect the safe operation of trains and will need to be reviewed carefully. Work must be monitored to ensure it conforms to the submitted/accepted plan.

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In-person safety review meetings will be required with BNSF representative, I/C, Contractor and Agency representative for all OC work and must be documented. The purpose of the meeting is to ensure all parties understand BNSF requirements and are following the applicable submittals. When a track work window is required the meeting shall occur at least 48 hours in advance of work starting.

Submittals must meet the requirements of the UP Railroad - BNSF Railway Guidelines for Railroad Grade Separation Projects. Submittals must also follow the requirements outlined in BNSF Review Comment Sheets, Use of Cranes & Lifting of Materials Submittal Schedule, BNSF Guidelines for Preparation of Bridge Demolition & Removal Plan and the BNSF-UPRR Guidelines for Temporary Shoring. Some submittals are required to be sealed by a licensed professional engineer.

- a. See Table 3-1 for Overhead Structures in UP Railroad BNSF Railway Guidelines for Railroad Grade Separation Projects
- b. See Table 3-2 for Underpass Structures UP Railroad BNSF Railway Guidelines for Railroad Grade Separation Projects
- c. Examples of OC submittals included in the above are:
  - i.Shoring (Follow BNSF-UPRR Guidelines for Temporary Shoring)
  - ii.Falsework
  - iii.Demolition (Need plans for substructure and superstructure. Follow BNSF Guidelines for Preparation of Bridge Demolition & Removal Plan)
  - iv. Erection (overhead and underpass structures)
  - v. Construction Phasing Plans
- d. Additional OC submittals required, but not included in the Guidelines are:
  - i.All work plans that remove tracks from service (track outage windows require a detailed Gantt chart when greater than 2 hours)
  - ii.Contingency plans
  - iii. Additional OC submittals may be required on a project by project basis.
- **4.5** Prior to any work commencing on BNSF right of way:

Contractors C/C-1 or Right of Entry must be fully executed and their insurance must be approved before they can perform work on BNSF property. Proof of Contractors insurance approval must be produced to the BNSF PE and the I/C.

**4.6** Contractor must adhere to all other BNSF policies and procedures not specifically mentioned in this agreement.

## 5.0 Interference with Railroad Operations.

- **5.1** The contractor shall arrange and conduct all work so that there shall be no interference with the Railroad's operations, including train, signal, telephone and telegraphic services; or damage to the Railroad's property; poles, wires and other facilities of tenants, licensees, easement grantees and invitees on the Railroad's right of way. Whenever work may affect the operations or safety of trains, the method of doing such work shall first be submitted to the Railroad Engineer for approval, but such approval shall not relieve the contractor from liability. Any work to be performed by the contractor that requires flagging service or inspection service shall be deferred by the contractor until the flagging service required by the Railroad is available at the job site.
- **5.2** Whenever work within the Railroad's right of way is of such a nature that impediment to the Railroad's operations is unavoidable, such as use of runaround tracks or necessity for reduced

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speed, the contractor shall schedule and conduct these operations so that such impediment is reduced to the absolute minimum.

- **5.3** Should conditions arising from, or in connection with the work require that immediate and unusual provisions be made to protect the Railroad's operations and property, the contractor shall make such provisions. If in the judgment of the Railroad Engineer, or the Engineer if the Railroad Engineer is absent, such provision is insufficient, the Railroad Engineer or Engineer may require or provide such provisions as deem necessary. In any event, such provisions shall be at the contractor's expense and without cost to the Railroad or the Commission.
- **5.4** The contractor shall be responsible for any damage to the Railroad as a result of work on the project, which shall include but not be limited to interference with the normal movement of trains caused exclusively by the work performed by the contractor. The contractor shall be responsible for damages for the Railroad's train delays that are caused exclusively by the contractor. The Railroad agrees not to perform any act to unnecessarily cause any train delay. The damages for train delays per freight hour will be billed at an average rate per hour as determined from the Railroad's records. These records shall be provided by the Railroad, upon request, to the Commission or the Commission's contractor.

#### 6.0 Track Clearances.

- **6.1** The minimum track clearances to be maintained by the contractor during construction are shown on the project plans. However, before undertaking any work within Railroad's right of way, or before placing any obstruction over any track, the contractor shall:
- (a) Notify the Railroad Engineer at least 72 hours in advance of the work.
- (b) Receive assurance from the Railroad Engineer that arrangements have been made for flagging service as may be necessary.
- (c) Receive permission from the Railroad Engineer to proceed with the work.
- (d) Ascertain that the Engineer has received copies of notice to the Railroad and of the Railroad's response.
- **6.2** The contractor shall fully comply with any horizontal and vertical clearance requirements imposed by Missouri state statutes and regulations and Federal statutes and regulations regarding the placement of structures or equipment near or over railroad tracks.

#### 7.0 Construction Procedures.

- **7.1 General.** Construction work on the Railroad's property shall be:
- (a) Subject to the inspection and review of the Railroad.
- (b) In accordance with the Railroad's written outline of specific conditions.
- (c) In accordance with this special provision.
- **7.2 Excavation.** The subgrade of an operated track shall be maintained with the berm edge at least 12 feet from centerline of track and not more than 26 inches below top of the rail. The

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contractor will not be required to make existing section meet this specification if substandard, in which case the existing section will be maintained. The contractor shall cease all work and notify the Railroad immediately before continuing excavation in the work area if obstructions are encountered which do not appear on the drawings. If the obstruction is a utility and the owner of the utility can be identified, then the contractor shall also notify the owner immediately. If there is any doubt about the location of underground cables or lines of any kind, no work shall be performed until the exact location has been determined. There will be no exceptions to these instructions. Additionally, all excavations shall be conducted in compliance with applicable Occupational Safety and Health Act regulations and, regardless of depth, shall be shored where there is any danger to tracks, structures or personnel. Any excavations, holes or trenches on the Railroad's property shall be covered, guarded and/or protected when not being worked on. When leaving work site areas at night and over weekends, the areas shall be secured and left in a condition that will ensure that Railroad's employees and other personnel who may be working or passing through the area are protected from all hazards. All excavations shall be back filled as soon as possible.

- 7.3 Excavation for Structure. The contractor shall be required to take special precaution and care in connection with excavating, shoring pits and in driving piles for footings adjacent to tracks to provide adequate lateral support for the tracks and the loads which the tracks carry, without disturbance of track alignment and surface, and to avoid obstructing track clearances with working equipment, tools or other material. The procedure for doing such work, including need of and plans for shoring, shall be approved by the Railroad Engineer before work is performed, but such approval shall not relieve the contractor from liability. Before submission of plans to the Railroad Engineer for approval, the Engineer will first review such plans in accordance with the Missouri Standard Specifications for Highway Construction, hereinafter called "Standard Specifications". The responsibility for the design and construction of the sheeting rests solely with the contractor. The temporary shoring along the railroad tracks shall be designed for the Cooper E80 loading. The design shall insure that the shoring is braced or substantially securely to prevent movement. The contractor shall submit plans for the temporary shoring that shall be signed, sealed, and stamped in accordance with the laws relating to Architects and Professional Engineers, Chapter 327, RSMo. and then submitted for review by the Engineer.
- **7.4 Demolition of Existing Structures.** The contractor shall be required to take special precaution and care in connection with demolition of existing structures. The procedure for doing such work, including need of and plans for temporary falsework, shall first be approved by Railroad Engineer before work is performed, but such approval shall not relieve the contractor from liability. Before submission of plans to the Railroad Engineer for approval, the Engineer will first review such plans.
- **7.5 Falsework.** The contractor shall be required to take special precaution and care to prevent any material from falling on the Railroad's right of way. The procedure for preventing material from falling, including need of and plans for temporary falsework, shall first be approved by the Railroad Engineer, but such approval shall not relieve the contractor from liability. Before submission of plans to the Railroad Engineer for approval, the Engineer will first review such plans.

## 7.6 Blasting.

**7.6.1** The contractor shall obtain advance approval of the Railroad Engineer and the Engineer for use of explosives on or adjacent to the Railroad's property. If permission for use of explosives is granted, the contractor shall be required to comply with the following:

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(a) Blasting shall be done with light charges under the direct supervision of a responsible officer or employee of the contractor.

- (b) Electric detonating fuses shall not be used because of the possibility of premature explosions resulting from operation of two-way train radios.
- (c) No blasting shall be done without the presence of the Railroad Engineer. At least 72 hours advance notice to the person designated in the Railroad's notice of authorization to proceed as mentioned in Section 3.2 of this job special provision, the contactor shall be required to arrange for the presence of the Railroad Engineer and such flagging as the Railroad may require.
- (d) The contractor shall have at the job site adequate equipment, labor and materials and allow sufficient time to clean up debris resulting from the blasting without delay to trains, as well as correcting, at contractor's expense, any track misalignment or other damage to the Railroad's property resulting from the blasting as directed by the Railroad Engineer. If contractor's actions result in delay of trains, the contractor shall bear the entire cost thereof.

# **7.6.2** The Railroad Engineer will:

- (a) Determine the approximate location of trains and advise the contractor the approximate amount of time available for the blasting operation and clean-up.
- (b) Have the authority to order discontinuance of blasting if blasting is too hazardous or is not in accordance with this special provision.
- **7.7 Maintenance of Railroad Facilities.** The contractor shall be required to maintain all ditches and drainage structures free of silt or other obstructions which may result from contractor's operations. The contractor shall promptly repair eroded areas within Railroad's right of way and repair any other damage to the Railroad's property, tenants, licensees, easement grantees and invitees. All such maintenance and repair of damages due to the contractor's operations shall be done at the contractor's expense.

## 7.8 Storage of Materials and Equipment.

- **7.8.1** The contractor shall not store or stockpile construction materials or equipment closer than 25 feet to the centerline of the nearest railroad track or on the Railroad's property not covered by construction easement, contractor's permit, lease or agreement. Additionally, the contractor shall not store or leave materials or equipment within 250 feet of the edge of any highway/rail at-grade crossings. Further, both sides of a main track shall remain unobstructed for a distance of 10 feet from the exterior edge of the track at all times to allow for stopped train inspection.
- **7.8.2** Machines or vehicles shall not be left unattended with the engine running. Parked machines or equipment shall be in gear with brakes set and with blade, pan or bucket lowered to the ground if so equipped. All grading or construction machinery that is left parked near the track unattended shall be effectively immobilized so that unauthorized persons cannot move such equipment.
- **7.9 Cleanup.** Upon completion of the work, the contractor shall remove from within the limits of the Railroad's right of way, all machinery, equipment, surplus materials, falsework, rubbish or temporary buildings of the contractor, and leave said right of way in a neat condition satisfactory to the Railroad Engineer.

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#### 7.10 Buried Cable and Other Buried Facilities.

**7.10.1** The contractor is placed on notice that fiber optic, communication and other cable lines and systems, collectively the "Lines", owned by various telecommunications companies may be buried on Railroad's property or right of way. The locations of the buried Lines, pipelines or utility facilities have been included on the plans based on information from the telecommunications companies, pipeline operators, or utilities, as the case may be. The contractor shall be responsible for contacting the Railroad Engineer, the Railroad's 24-hour information number (1-800-533-2891), the telecommunications companies, pipeline operators and utilities and notifying them of any work that may damage the buried Lines, pipelines, utility facilities and/or interfere with their service. The contractor shall verify the location of all buried Lines, pipelines and utility facilities shown on the plans or marked in the field in order to establish their exact locations prior to or while doing work on the Railroad's property or right of way. The contractor shall also use all reasonable methods when working on the Railroad's property or right of way to determine if any other buried Lines, pipelines or utility facilities exist on the Railroad's property or right of way.

- **7.10.2** Failure to mark or identify the buried Lines, pipelines or utility facilities will be sufficient cause for the Railroad Engineer to stop construction at no cost to the Commission or Railroad until these items are completed. The contractor shall be responsible for the rearrangement of any buried facilities, Lines, pipelines or utility facilities determined to interfere with the construction. The contractor shall cooperate fully with any telecommunications companies, pipeline operators and utility facility owners in performing such rearrangements.
- **8.0 Damages.** The Railroad will not assume liability for any damages to the contractor, contractor's work, employees, servants, equipment and materials caused by railroad traffic. Any cost incurred by the Railroad for repairing damages to Railroad's property or to property of the Railroad's tenants, licensees, easement grantees and invitees caused by or resulting from the contractor's operations shall be paid directly to the Railroad by contractor.

## 9.0 Flagging Services.

**9.1 When Required.** Under the terms of the agreement between the Commission and the Railroad, the Railroad has sole authority to determine the need for flagging required to protect the Railroad's operations. In general, the requirements of such services will be whenever the contractor's personnel or equipment are, or are likely to be, working on the Railroad's right of way within 25 feet of the centerline of any track, or across, over, adjacent to, or under a track, or when such work has disturbed or is likely to disturb a railroad structure or the railroad roadbed or surface and alignment of any track to such extent that the movement of trains must be controlled by flagging, or reasonable probability of accidental hazard to Railroad's operations or personnel. Normally, the Railroad will assign one flagger to a project; but in some cases, more than one may be necessary, such as yard limits where 3 flaggers may be required. However, if the contractor works within distances that violate instructions given by the Railroad Engineer or performs work that has not been scheduled with the Railroad Engineer, flaggers may be required full time until the project has been completed.

## 9.2 Scheduling and Notification.

**9.2.1** Not later than the time that approval is initially requested to begin work on the Railroad's right of way (30 days), contractor shall furnish to the Railroad and the Commission a schedule for all work required to complete the portion of the project within Railroad's right of way and arrange

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for a job site meeting between the contractor, the Engineer, and the Railroad Engineer. Flaggers may not be provided until the job site meeting has been conducted and the contractor's work scheduled.

9.2.2 The contractor shall be required to give the Railroad Engineer at least 30 days of advance written notice of intent to begin work within Railroad's right of way in accordance with this special provision. Once begun, if such work is then suspended at any time, or for any reason, the contractor shall be required to give the Railroad Engineer at least 5 working days of advance notice before resuming work on Railroad's right of way. Such notices shall include sufficient details of the proposed work to enable the Railroad Engineer to determine if flagging will be required. If such notice is in writing, the contractor shall furnish the Engineer a copy; if notice is given verbally, the notice shall be confirmed in writing with copy to the Engineer. If flagging is required, no work shall be undertaken until the flagger or flaggers are present at the job site. Obtaining a flagger or flaggers may take up to 30 days to obtain initially from the Railroad. When flagging begins, the flagger is usually assigned by the Railroad to work at the project site on a continual basis until no longer needed and cannot be called for on a spot basis. If flagging becomes unnecessary and is suspended, obtaining a flagger or flaggers may take up to 30 days to again obtain from the Railroad. Due to Railroad labor agreements, 10 working days notice may be necessary before flagging services may be discontinued and responsibility for payment stopped. Notification for flagging should be addressed to:

Johnathan Arnett, Jr. BNSF Railway Johnathan.arnettjr@bnsf.com

- **9.2.3** If, after the flagger is assigned to the project site, emergencies arise which require the flagger's presence elsewhere, then the contractor shall delay work on the Railroad's right of way until such time as the flagger is again available. Any additional costs resulting from such delay shall be borne by the contractor and not the Railroad.
- **9.2.4** The contractor shall provide a temporary structure to provide shelter from weather conditions for the person(s) providing flagging protection service on behalf of the Railroad as described herein. The structure shall be provided in an area immediately accessible to the Railroad's main track and the construction site, and be equipped with telephone service, lighting and desk.

#### 9.3 Payment.

- **9.3.1** The Commission will pay the Railroad directly for the cost of flagging services associated with the project by deducting the amount from the normal contractor payments.
- **9.3.2** The Railroad shall submit progress invoice to the Engineer during the time flagging services are required. A final invoice shall be submitted to the Engineer within 180 days of completion of the project. This is defined as the point in time at which the Commission and the Railroad both accept the project and the contractor is relieved of contractual obligation. Should the invoice not be received within this time period, the Railroad will be responsible for obtaining payment directly from the contractor.
- **9.3.3** Should a dispute between the Railroad, the Commission and the contractor develop concerning the cost of flagging service or should the contractor fail to promptly pay the Railroad for flagging services, the full amount of the Railroad's invoice will be deducted from the

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contractor's payment request. However, The Commission will send only 95 percent of the amount requested to the Railroad. The Commission will make a corrected payment once a settlement is reached between the Railroad, the Commission and the contractor.

- **9.3.4** The contractor shall be responsible for arranging needed flagging services as required by the Railroad to accomplish the highway improvement.
- 9.3.5 The cost of flagging service is approximately \$1500 per day based on an 8-hour work day and a 40-hour work week. This cost includes the base pay for the flagger, overhead, and per diem charge for travel expenses, meals and lodging. The charge to the contractor by the Railroad will be the actual cost based on the rate of pay for the Railroad's employees who are available for flagging service at the time the service is required. Work by a flagger in excess of 8 hours per day or 40 hours per week but not more than 12 hours a day will result in overtime pay at 1 ½ times the appropriate rate. Work by a flagger in excess of 12 hours per day will result in overtime pay at 2 times the appropriate rate. If work is performed on a holiday, the flagging rate is 2 ½ times the normal rate. Railroad expenses incurred preparing and handling invoices will also be charged to the contractor and/or the Commission. Charges to the contractor and/or the Commission by the Railroad shall be in accordance with applicable provisions of Volume 1, Chapter 4, §3 and Volume 6, Chapter 6, §2, Subsection 1 of the Federal-Aid Highway Program Manual issued by the Federal Highway Administration, including all current amendments. Flagging costs are subject to change. The above estimates of flagging cost are provided for information only and are not binding in any way. Each time a flagger is called, th31inimumm period for billing will be the 8 hour basic day unless the flagger can be assigned to other Railroad work during the work day.
- **9.3.6** A maximum of one hour travel time each way per day per flagger will be required for travel to and from the project.

#### 9.4 Verification.

- **9.4.1** Any complaints concerning a flagger shall be resolved in a timely manner. If need for a flagger is questioned, please contact the Railroad Engineer and Ms. Kara Brockamp, Manager of Public Projects at (913) 551 4484. All verbal complaints shall be confirmed in writing by the contractor within 5 working days with copy to the Railroad Engineer and Engineer. All written correspondence shall be addressed to Ms. Brockamp as shown in Section 3.1 of this job special provision.
- **9.4.2** The Railroad flagger assigned to the project will be responsible for notifying the Engineer upon arrival at the job site on the first day, or as soon thereafter as possible, that flagging services begin and on the last day that flagger performs such services for each separate period that services are provided. The Engineer will document such notification in the project records.

#### 10.0 Haul Across Railroads.

**10.1** Where the plans show or imply that materials of any nature must be hauled across the Railroad's tracks, unless the plans clearly show that the Commission has included arrangements for such haul in the agreement with the Railroad, the contractor shall be required to make all necessary arrangements with the Railroad regarding means of transporting such materials across the Railroad's tracks. The contractor shall be required to bear all costs incidental to such crossings, including flagging, whether services are performed by contractor's own forces or by Railroad's personnel.

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**10.2** No crossing may be established for use of the contractor for transporting materials or equipment across the tracks of the Railroad unless specific authority for the installation, maintenance, necessary watching and flagging thereof and removal, all at the expense of the contractor, is first obtained from the Railroad Engineer.

- **11.0 Work for the Benefit of the Contractor.** All temporary or permanent changes in wire lines or other facilities which are considered necessary to the project are shown on the plans, and are included in the agreement between the Commission and the Railroad or will be covered by appropriate revisions to same which will be initiated and approved by the Commission and/or the Railroad. Should the contractor desire any changes in addition to the above, then contractor shall make separate arrangements with the Railroad for same to be accomplished at the contractor's expense.
- **12.0 Cooperation and Delays.** The contractor shall arrange a schedule with the Railroad for accomplishing staged construction involving work by the Railroad or tenants, licensees, easement grantees and invitees of the Railroad. In arranging a schedule, the contractor shall ascertain, from the Railroad, the lead time required for assembling crews, materials and make due allowance. No charge of claims of the contractor against the Railroad will be allowed for hindrance or delay on account of railway traffic for any work done by the Railroad, other delay incident to or necessary for safe maintenance of railway traffic, or for any delays due to compliance with this special provision.
- **13.0 Trainman's Walkways.** Along the outer side of each exterior track of multiple operated track and on each side of single operated track, an unobstructed continuous space suitable for trainman's use in walking along trains shall be maintained extending to a line not less than 12 feet from centerline of track. Any temporary impediments to walkways and track drainage encroachments or obstructions allowed during work hours while Railroad's protective service is provided shall be removed before the close of each work day. Any excavation near the walkway, the contractor shall install a handrail with a 12 feet minimum clearance from centerline of track.
- **14.0 Insurance.** The amount of work to be performed upon, over or under Railroad's right of way is estimated to be one percent of the contractor's total bid for the project.
- **14.1** In addition to any other forms of insurance or bonds required under the terms of the contract and specifications, Contractor must, at its sole cost and expense, procure and maintain during the life of this Agreement the following insurance coverage:

Commercial General Liability insurance. This insurance shall contain broad form contractual liability with a combined single limit of a minimum of \$5,000,000 each occurrence and an aggregate limit of at least \$10,000,000 but in no event less than the amount otherwise carried by the contractor. Coverage must be purchased on a post 2004 ISO occurrence form or equivalent and include coverage for, but not limit to the following:

Bodily Injury and Property Damage Personal Injury and Advertising Injury Fire legal liability Products and completed operations

This policy must also contain the following endorsements, which must be indicated on the certificate of insurance:

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The definition of insured contract must be amended to remove any exclusion or other limitation for any work being done within 50 feet of railroad property. Waiver of subrogation in favor of and acceptable to Railroad.

Additional insured endorsement in favor of and acceptable to Railroad. Separation of insureds. The policy shall be primary and non-contributing with respect to any insurance carried by Railroad.

It is agreed that the workers' compensation and employers' liability related exclusions in the Commercial General Liability insurance policy(s) required herein are intended to apply to employees of the policy holder and shall not apply to Railroad employees.

No other endorsements limiting coverage as respects obligations under this Agreement may be included on the policy with regard to the work being performed under this agreement.

Business Automobile Insurance. This insurance must contain a combined single limit of at least \$1,000,000 per occurrence, and include coverage for, but not limited to the following:

Bodily injury and property damage Any and all vehicles owned, used or hired

The policy shall also contain the following endorsements or language, which shall be indicated on the certificate of insurance:

Waiver of subrogation in favor of and acceptable to Railroad.

Additional insured endorsement in favor of and acceptable to Railroad.

Separation of insureds.

The policy shall be primary and non-contributing with respect to any insurance carried by Railroad.

Workers Compensation and Employers Liability insurance including coverage for, but not limited to:

Contractor's statutory liability under the worker's compensation laws of the state(s) in which the work is to be performed. If optional under State law, the insurance must cover all employees anyway.

Employers' Liability (Part B) with limits of at least \$500,000 each accident, \$500,000 by disease policy limit, \$500,000 by disease each employee.

This policy shall also contain the following endorsements or language, which shall be indicated on the certificate of insurance:

Waiver of subrogation in favor of and acceptable to Railroad.

Railroad Protective Liability insurance naming only the Railroad as the Insured with coverage of at least \$5,000,000 per occurrence and \$10,000,000 in the aggregate. The policy Must be issued on a standard ISO form CG 00 35 10 93 and include the following:

Endorsed to include the Pollution Exclusion Amendment (ISO form CG 28 31 10 93)

Endorsed to include the Limited Seepage and Pollution Endorsement.

Endorsed to include Evacuation Expense Coverage Endorsement.

Endorsed to remove any exclusion for punitive damages.

No other endorsements restricting coverage may be added.

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The original policy must be provided to the Railroad prior to performing any work or services under this Agreement

In lieu of providing a Railroad Protective Liability Policy, Licensee may participate in Licensor's Blanket Railroad Protective Liability Insurance Policy available to contractor.

## **14.2** Other Requirements:

- **14.2.1** All policies (applying to coverage listed above) must not contain an exclusion for punitive damages and certificates of insurance must reflect that no exclusion exists.
- **14.2.2** Contractor agrees to waive its right of recovery against Railroad for all claims and suits against Railroad. In addition, its insurers, through the terms of the policy or policy endorsement, waive their right of subrogation against Railroad for all claims and suits. The certificate of insurance must reflect the waiver of subrogation endorsement. Contractor further waives its right of recovery, and its insurers also waive their right of subrogation against Railroad for loss of its owned or leased property or property under contractor's care, custody or control.
- **14.2.3** Contractor is not allowed to self-insure without the prior written consent of Railroad. If granted by Railroad, any deductible, self-insured retention or other financial responsibility for claims must be covered directly by contractor in lieu of insurance. Any and all Railroad liabilities that would otherwise, in accordance with the provisions of this Agreement, be covered by contractor's insurance will be covered as if contractor elected not to include a deductible, self-insured retention or other financial responsibility for claims.
- **14.2.4** Prior to commencing the Work, contractor must furnish to Railroad an acceptable certificate(s) of insurance including an original signature of the authorized representative evidencing the required coverage, endorsements, and amendments and referencing the contract audit/folder number if available. Contractor shall notify Railroad in writing at least 30 days prior to any cancellation, non-renewal, substitution or material alteration. Upon request from Railroad, a certified duplicate original of any required policy must be furnished. Contractor should send the certificate(s) to the following address:

Railroad: Commission:

BNSF Railway Company
P.O. Box 140528
Kansas City, MO 64114
Toll Free: 877-576-2378

Commission:
Ms. Brandi Baldwin
State Construction and Materials Engineer
MoDOT
P.O. Box 270

Fax number: 817-840-7487 Jefferson City, MO 65102

Email: BNSF@certfocus.com

www.certfocus.com

- **14.2.5** Any insurance policy must be written by a reputable insurance company acceptable to Railroad or with a current Best's Guide Rating of A- and Class VII or better, and authorized to do business in the state(s) in which the service is to be provide.
- **14.2.6** Contractor represents that this Agreement has been thoroughly reviewed by contractor's insurance agent(s)/broker(s), who have been instructed by contractor to procure the insurance coverage required by this Agreement. Allocated Loss Expense must be in addition to all policy limits for coverages referenced above. Not more frequently than once every five years, Railroad

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may reasonably modify the required insurance coverage to reflect then-current risk management practices in the railroad industry and underwriting practices in the insurance industry.

- **14.2.7** If any portion of the operation is to be subcontracted by contractor, contractor must require that the subcontractor provide and maintain the insurance coverages set forth herein, naming Railroad as an additional insured, and requiring that the subcontractor release, defend and indemnify Railroad to the same extent and under the same terms and conditions as contractor is required to release, defend and indemnify Railroad herein.
- **14.2.8** Failure to provide evidence as required by this section will entitle, but not require, Railroad to terminate this Agreement immediately. Acceptance of a certificate that does not comply with this section will not operate as a waiver of contractor's obligations hereunder.
- **14.2.9** The fact that insurance (including, without limitation, self-insurance) is obtained by contractor will not be deemed to release or diminish the liability of contractor including, without limitation, liability under the indemnity provisions of this Agreement. Damages recoverable by Railroad will not be limited by the amount of the required insurance coverage.
- **14.2.10** For purposes of this section, Railroad means "Burlington Northern Santa Fe LLC", "BNSF RAILWAY COMPANY" and the subsidiaries, successors, assigns and affiliates of each.
- **14.2.11** Railroad will not accept binders as evidence of insurance, the original policy shall be provided. The named insured, description of the work and designation of the job site to be shown on the Policy are as follows:
  - (a) Named Insured: BNSF Railway Company
  - (b) Description and Designation:

Route A, MoDOT bridge# A2740; Scotland County Job No. J2S3324

Rehabilitation of bridge over BNSF, US DOT# 005046F MP 282.13 Marceline Sub in Rutledge, MO.

- **14.2.12** The contractor must notify BNSF Manager of Public Projects at Kara.Brockamp@bnsf.com, when applying for railroad insurance coverage.
- **14.3** If any part of the work is sublet, similar insurance and evidence thereof in the same amounts as required of the prime contractor, shall be provided by or in behalf of the subcontractor to cover the subcontractor's operations. Endorsements to the prime contractor's policies specifically naming subcontractors and describing their operations will be acceptable for this purpose.
- **14.4** All Insurance hereinbefore specified shall be carried until all work required to be performed under the terms of the contract has been satisfactorily completed within the limits of the Railroad's right of way as evidenced by the formal acceptance by the Commission. Insuring Companies may cancel insurance by permission of the Commission and Railroad or on 30 days written notice to the Railroad and Commission.
- **15.0** Hazardous Materials Compliance and Reporting. Contractor shall be responsible for complying with all applicable federal, state and local governmental laws and regulations, including, but not limited to environmental laws and regulations (including but not limited to the Resource Conservation and Recovery Act, as amended; the Clean Water Act, as amended; the Oil Pollution Act, as amended; the Hazardous Materials Transportation Act, as amended; and the

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Comprehensive Environmental Response, Compensation and Liability Act, as amended), and health and safety laws and regulations. In addition to the liability provisions contained elsewhere in this job special provision, the contractor hereby indemnifies, defends and holds harmless the Railroad for, from and against all fines or penalties imposed or assessed by federal, state and local governmental agencies against the Railroad which arise out of contractor's work under this special provision. Notwithstanding the preceding sentence, the contractor will not be liable for pre-existing hazardous materials or hazardous substances discovered on Railroad's property or right of way so long as such hazardous materials or hazardous substances were not caused by (in whole or in part) contractor's work, acts or omissions. If contractor discovers any hazardous waste, hazardous substance, petroleum or other deleterious material, including but not limited to any non-containerized commodity or material, on or adjacent to Railroad's property, in or near any surface water, swamp, wetlands or waterways, while performing any work under this special provision, the contractor shall immediately:

- (a) Notify the Railroad's Resource Operations Center at (800) 832-5452, of such discovery.
- (b) Take safeguards necessary to protect employees, subcontractors, agents and/or third parties.
- (c) Exercise due care with respect to the release, including the taking of any appropriate measure to minimize the impact of such release
- **16.0 Personal Injury Reporting.** The Railroad is required to report certain injuries as a part of compliance with Federal Railroad Administration ("FRA") reporting requirements. Any personal injury sustained by any employee of the contractor, subcontractor or contractor's invitees while on the Railroad's property shall be reported immediately, by phone or mail if unable to contact in person, to the Railroad's representative in charge of the project. The Non-Employee Personal Injury Data Collection Form is to be completed and sent by Fax to the Railroad at (817) 352-7595 and to the Railroad's Project Representative no later than the close of shift on the date of the injury.
- **17.0** Failure to Comply. In the event the contractor violates or fails to comply with any of the requirements of this special provision, the below orders will be applied. Any such orders shall remain in effect until the contractor has remedied the situation to the satisfaction of the Railroad Engineer and the Engineer.
- (a) The Railroad Engineer may require that the contractor to vacate the Railroad's property.
- (b) The Engineer may withhold all monies due to the contractor until contractor has remedied the situation to the satisfaction of the Railroad Engineer and the Engineer.
- **18.0 Payment for Cost of Compliance.** No separate payment will be made for any extra cost incurred on account of compliance with this special provision. All such cost shall be included in the contract unit price for other items included in the contract. Railroad will not be responsible for paying the contractor for any work performed under this special provision.
- **18.1** If applicable to the project, the contractor must submit a plan for demolition, falsework, lifting plans over the Railroad property, shoring plans and any other applicable plans the Railroad may require as well as means and methods to the Railroad for review and approval. All plans submitted to the Railroad must be signed and sealed by Professional Engineer licensed in the State of Missouri. These plans can be submitted along with the Right of Entry application; however, the Right of Entry will not be approved until all required plan submittals are approved by the Railroad. The Railroad may also require an onsite inspector to assure the work is carried out in accordance with the Railroad approved plans.

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# 18.1.1 Payment for plan submittal, Railroad plan review and Railroad inspection fees.

The contractor shall be responsible for all costs associated with the generation and submittal of Railroad plans required for the right of entry agreement. The Commission will be responsible for and directly pay the Railroad for all Railroad review fees associated with these plan submittals and any onsite inspection and management fees charged by the Railroad. A line item (Railroad Plan Submittal) is provided for all costs associated with the generation and submittal of plans required for the Railroad right of entry agreement.

| Item No.  | Unit | Description             |
|-----------|------|-------------------------|
| 618-10.15 | LS   | Railroad Plan Submittal |