

Job No.: J6I3541  
Route: I-70 & MO 364  
County: Various

**JOB SPECIAL PROVISIONS TABLE OF CONTENTS (ROADWAY)**

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

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	<b>MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION</b> 105 W. CAPITOL AVE. JEFFERSON CITY, MO 65102 Phone 1-888-275-6636
	If a seal is present on this sheet, JSP's have been electronically sealed and dated.
	JOB NUMBER: J6I3541 VARIOUS COUNTIES, MO DATE PREPARED: 08/09/21
	ADDENDUM DATE:
Only the following items of the Job Special Provisions (Roadway) are authenticated by this seal: All	

JOB  
SPECIAL PROVISION

A. General - Federal JSP-09-02G

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

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

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

General Provisions & Supplemental Specifications

Supplemental Plans to July 2021 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. Contract Liquidated Damages JSP-13-01B

**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 shall be completed on or before the date specified below. Completion by this date shall be in accordance with the requirements of Sec 108.7.1.

Job No.: J6I3541  
Route: I-70 & MO 364  
County: Various

Notice to Proceed: January 3<sup>rd</sup>, 2022  
Completion Date: July 29<sup>th</sup>, 2022

**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
J6I3541	N/A	\$7,600

**3.0 Liquidated Damages for Contract Administrative Costs.** Should the contractor fail to complete the work on or before the 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 **\$250** 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 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 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-02-06J

**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 Work Zone Specialist (WZS).** The Traffic Management Plan shall name an individual, either employed by the contractor or hired by the contractor, to act as the Work Zone Specialist (WZS) throughout the entirety of the project. Any change in personnel for the WZS shall be submitted in written form to the engineer. This individual will be a trained Work Zone Specialist in accordance with Standard Specifications Section 616.3.3 and will be directly involved with daily traffic management and traffic management planning. It will be the responsibility of the WZS to coordinate daily traffic management with the engineer. The WZS shall maintain daily contact with the engineer either on-site or via telecommunication.

**1.2 Maintaining Work Zones and Work Zone Reviews.** The WZS shall maintain work zones on a daily basis to ensure safety to the traveling public and the workers; this includes long term work zones that have devices and/or roadway conditions that need to be maintained. If the engineer or a designated MoDOT employee (identified at the preconstruction meeting) notifies the WZS of any safety or traffic delay concerns in the work zone, the WZS shall promptly inspect and work to provide a solution to correct the situation. The WZS shall have personnel reviewing traffic control devices daily and any temporary lane drop traffic control devices for initial set up and during the operation. Missing, damaged or over-turned traffic control devices shall typically be corrected without the need for direction by the engineer. The WZS is responsible to assure all traffic control devices are maintained in accordance with EPG

standards. The WZS is responsible to ensure 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. The WZS and engineer shall submit one joint weekly technical review of work zone operations identifying any concerns present and the corrective actions taken. Reviews may be subjected to unannounced inspections by the engineer to corroborate the validity of the ratings. The engineer and WZS will be notified of the results.

**1.3 Work Zone Conflict Resolution.** Any conflict resolution shall be in accordance with Standard Specifications Section 616.4. 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.

## **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 beyond this delay threshold. If disruption of the traffic flow occurs and traffic is backed up in queues equal to or greater than the delay time threshold listed above 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 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  
Juneteenth

**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:

12:00 noon July 1, 2022 – 6:00 a.m. July 5, 2022

**3.1.2** The contractor's working hours will be restricted for the Special Events as shown below. All lanes shall be scheduled to be open to traffic during these Special Events, **unless approved by the Engineer.**

St. Louis Cardinals Home Games

Concerts and Other Special Events at Hollywood Casino St. Louis and Hollywood Casino Amphitheater

Concerts and Other Special Events at The Family Arena in St. Charles, MO

**3.2** The contractor shall not perform any construction operation on the *roadway (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** The contractor shall be aware that traffic volume data indicates construction operations on the roadway will likely result in traffic queues greater than 10 minutes. Based on this, the following hours shall be used for the contractor's operations. It shall be the responsibility of the engineer to determine if the work hours below may be modified. Working hours for weekends and holidays will be determined by the engineer.

MO Route 364 Eastbound:

9:00 a.m. – 6:00 a.m. Monday through Friday (1 Lane Closed)\*

7:00 p.m. – 6:00 a.m. Monday through Friday (2 Lanes Closed)  
9:00 p.m. – 4:00 a.m. Monday through Friday (3 Lanes Closed)  
\*No Work During AM Rush, 6 a.m. to 9 a.m.

MO Route 364 Westbound:

6:00 p.m. – 2:00 p.m. Monday through Friday (1 Lane Closed)\*\*  
8:00 p.m. – 9:00 a.m. Monday through Friday (2 Lanes Closed)  
10:00 p.m. – 4:00 a.m. Monday through Friday (3 Lanes Closed)  
\*\* No Work During PM Rush, 2 p.m. to 6 p.m.

I-70 Eastbound:

8:00 p.m. - 5:00 a.m. Monday through Friday (1 Lane Closed)

I-70 Westbound:

8:00 p.m. - 5:00 a.m. Monday through Friday (1 Lane Closed)

Tucker Boulevard/Cass Avenue Intersection:

10:00 p.m. - 4:00 a.m. Monday through Friday (Ramp to EB I-70, includes the closing of other lanes at intersection as shown in the plans)

**3.4** The contractor shall not alter the start time, ending time, or a reduction in the number of through lanes of traffic or ramp closures without advance notification and approval by the engineer. The only work zone operation approved to begin 30 minutes prior to a reduction in through traffic lanes or ramp closures is the installation of traffic control signs. Should lane closures be placed or remain in place, prior to the approved starting time or after the approved ending time, the Commission, the traveling public, and state and local police and governmental authorities will be damaged in various ways, including but not limited to, increased construction administration cost, potential liability, traffic and traffic flow regulation cost, traffic congestion and motorist delays, with a resulting cost to the traveling public. These damages are not easily computed or quantified. Therefore, the contractor will be charged with liquidated damages specified in the amount of **\$1000 per 15 minute increment** for each 15 minutes that the temporary lane closures are in place and not open to traffic in excess of the limitation as specified elsewhere in this special provision. It shall be the responsibility of the engineer to determine the quantity of unapproved closure time.

**3.4.1** The said liquidated damages specified will be assessed regardless if it would otherwise be charged as liquidated damages under the Missouri Standard Specification for Highway Construction, as amended elsewhere in this contract.

#### **4.0 Detours and Lane Closures.**

**4.1** When a changeable message sign (CMS) is provided, the contractor shall use the CMS to notify motorists of future traffic disruption and possible traffic delays one week before traffic is shifted to a detour or prior to lane closures. The CMS shall be installed at a location as approved or directed by the engineer. The CMS shall be capable of communication with the Transportation Management Center (TMC), if applicable, prior to installation on right of way. All messages planned for use in the work zone shall be approved and authorized by the engineer or its designee prior to deployment. When permanent dynamic message signs (DMS) owned and operated by MoDOT are located near the project, they may also be used to provide warning and information for the work zone. Permanent DMS shall be operated by the TMC, and any

messages planned for use on DMS shall be approved and authorized by the TMC at least 72 hours in advance of the work.

**4.2** At least 2 lanes of traffic in each direction on MO 364 shall be maintained at all times except for brief intervals of time required when the movement of the contractor's equipment will seriously hinder the safe movement of traffic. At least 1 lane of traffic on I-70 in each direction shall be maintained at all times except for brief intervals of time required when the movement of the contractor's equipment will seriously hinder the safe movement of traffic. Periods during which the contractor will be allowed to interrupt traffic will be designated by the engineer.

**5.0 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. Traffic Management Coordination

**1.0 Description.** The contractor shall coordinate traffic management between this project and any other projects on I-44 and I-70, and projects which affect Route I-44 and I-70, including all future projects. The contractor shall be aware of the following jobs:

J6S3272, J6S3638 – I-44/70 Broadway Bridge and Reversible Lane Exit Bridge Replacement (A0134)

J6S3429, J6S3429B – I-70 Bridge Rehabilitations, N Hanley to Madison St, Adelaide Ave

J6I3424 – I-70 Resurfacing, Branch to Biddle

J6I3463 – I-70 Structural Sign Improvements

**1.1** The contractor shall also coordinate traffic management between this project and any other projects on MO 364. The contractor shall be aware of the following jobs:

J6P3373 – Striping Improvements on MO 364 between Jungs Station Road and the MO River

J6P3418 – Interchange Improvements at the 364/94/Muegge Road Interchange

**1.2** This list of projects is not all inclusive. The contractor shall be aware that there may be other projects including, but not limited to, utility, St. Louis City, private, MoDOT maintenance, permit, or other projects that may impact project construction or traffic control in the vicinity of this project. It shall be the responsibility of the contractor to determine what, if any, projects other than the ones listed above may impact this project and work to coordinate construction and traffic management efforts between this project and any other project involved.

**1.3** Each Contractor shall conduct their work so as not to interfere with or hinder the progress or completion of the work being performed by other Contractors. In case of dispute, the Engineer shall be the referee and the Engineer's decision shall be final and binding on all.

**2.0 Site Construction.** The Contractor shall arrange the work and shall place and dispose of the materials being used so as not to interfere with the operations of the other contractors.

**3.0 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.

E. 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.

**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: 636-300-2800		
Illinois State Police: 618-346-3990		
St. Louis County Police: 314-889-2341		
St. Charles County Police: 636-949-3000		
St. Charles County Ambulance District: 636-344-7600		
Central County (St. Charles County) Fire & Rescue: 636-970-9700		
City of St. Louis	City of Maryland Heights	
Fire: 314-533-3406	Pattonville Fire District: 314-739-3118	
Police: 314-231-1212	Police: 314-298-8700	

**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.



F. 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.

Alvin Nieves-Rosario, Project Manager  
St. Louis District  
1590 Woodlake Drive  
Chesterfield, MO 63017

Telephone Number: 314-453-1839  
Email: [Alvin.Nieves-Rosario@modot.mo.gov](mailto:Alvin.Nieves-Rosario@modot.mo.gov)

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

G. Coordination with Outside Entities

**1.0 Description.** The contractor shall keep the following entities informed of ongoing work and minimize the impact to their operations.

**2.0 Coordination.** The Contractor shall coordinate with the following individuals:

**Illinois Department of Transportation:**  
Joe Monroe  
Email: [Joseph.Monroe@illinois.gov](mailto:Joseph.Monroe@illinois.gov)  
Telephone: 618-346-3250

**3.0 Basis of Payment.** No direct payment will be made to the contractor for meeting the requirements set in this provision.

H. Scope of Work

**1.0** The scope of work for this project is to remove loose debris and associated chlorides from existing bridge structures within the St. Louis District as shown within the as-built plans and as specified by the Engineer. Work for this project includes the cleaning of specific areas of bridge components and structural steel.

**1.1 Background.** MoDOT routinely washes bridge decks to remove debris and associated chlorides at least once per year. The scope of this contract is to provide for thorough washing of the bridge deck, gutters, drains, superstructure areas within 10 ft. vertical from pavement (splash zone), lower chords of superstructure members along the exterior of the bridge, beam caps and bearing areas, joints and associated diaphragms/drains, and all exposed steel below the deck within 10 ft. longitudinal distance from each open joint area. Flushing the enclosed drain piping systems including down spouts not tied into an existing sewer is also included within this work.

**1.2 Timing.** Based upon the NTP (Notice to Proceed) date under the Contract Time Liquidated Damages JSP, the contractor can begin work on January 3<sup>rd</sup>, 2022. **However, the contractor will not be allowed to begin the washing on the bridge decks until April 1, 2022.** The contractor will still be responsible for removing the bird nests between the NTP date and March 15<sup>th</sup> as described within the Restrictions for Migratory Birds JSP.

**2.0** The work boundaries for the terms of the contract include Commission owned bridge structures between St. Louis City/State of Illinois and St. Charles County/St. Louis County, within the limits of Commission right-of-way, as noted below.

**Bridge Number – Route – Feature -County/County**

A6500, I-70 (EB & WB), Mississippi River, St. Louis City/State of Illinois

A5585 (2 bridges), MO 364, MO River, St. Charles/St. Louis Counties

**STRUCTURE DESCRIPTIONS (A6500)**

#1: Structure No. A6500, carrying I-70 between Missouri and Illinois over the Mississippi River. Both directions will be included within this project. This 22-span structure has an overall length of 6463 feet, a total width of 94 feet (out to out) on the main structure. There are three cable-stay spans over the Mississippi River and 19 steel plate girder and beam approach spans on either side of the cable-stay spans. Expansion joints are present at pier 2, pier 5, pier 10, pier 13, pier 17 and pier 23. The cleaning areas are outlined on the plans and described in more detail in the Structure Cleaning Notes, below.

**STRUCTURE DESCRIPTIONS (A5585, twin bridges)**

#2: Structure No. A5585 (two bridges), carrying MO 364 over the Missouri River. Each bridge includes a 17-span structure with an overall length of 3238 feet, a total width of 86 feet (out to out). There is one tied arch section over the navigable channel, and 16 plate girder and beam approach spans on each bridge. The MO 364 westbound (WB) bridge also includes a bicycle path on the north side of the structure, approximately 11.5 ft. wide (curb to curb). Expansion joints are present on both bridge and bike path at end bent 1, pier 4, pier 5, pier 8, pier 11, and end bent 18. The cleaning areas are outlined on the as-builts and described in more detail in the Structure Cleaning Notes, below.

**3.0 Bridge Deck Sweeping.** Prior to flushing/washing of any structure, including the bridge deck, the contractor shall sweep the existing bridge deck to remove any debris.

**4.0 STRUCTURE CLEANING NOTES:**

**4.1 Truss Spans.** Truss Spans areas to be washed include all structural steel, including lower chord to a point 10 ft. vertical above the bridge deck elevation.

Curbs, joints, drains, diaphragms, troughs, open scuppers and railings.

All Floor beams, diagonal bracing, stringers, and other structural steel from the lower chord inward to and including the outside and bottom of exterior stringers.

All abutment and pier caps and bearings.

All structural steel located below the bridge deck within 10 ft. longitudinal on either side of all open expansion joints (open joints such as finger plates with troughs or diapers).

Compression joints only require washing of the joint surface, in order to remove debris from the top surface of the joint material.

**4.2 Tied Arch Spans.** All structural steel and cable from the lower chord to a point 10 ft. vertical above the bridge deck elevation.

All floor beams, diagonal bracing, stringers, and other structural steel from the lower chord inward to and including the outside and bottom of exterior stringers.

Curbs, joints, drains, diapers, troughs, open scuppers and railings.

All abutments, pier caps, and bearings. All structural steel located below the bridge deck within 10 ft. longitudinal on either side of all open expansion joints (open joints such as finger plates with troughs or diapers).

Compression joints only require washing of the joint surface, in order to remove debris from the top surface of the joint material.

#### **4.3 Multi-beam or Approach Spans.**

All deck joints, diapers, drains, and deck drains.

Curbs, joints, drains, diapers, troughs, open scuppers and railings.

The outside and bottoms of fascia beams.

All abutments, pier caps, and bearings.

All structural steel located below the deck within 10 ft. longitudinally on either side of all open expansion joints (open joints such as finger plates with troughs or diapers).

Compression joints only require washing of the joint surface, in order to remove debris from the top surface of the joint material.

#### **4.4 Cable-Stay Spans.**

All deck joints, diapers, drains, and deck drains.

Curbs, joints, drains, diapers, troughs, open scuppers and railings.

The outside and bottoms of fascia beams.

All abutments, pier caps, and bearings.

All structural steel located below the deck within 10 ft. longitudinally on either side of all open expansion joints (open joints such as finger plates with troughs or diapers).

Compression joints only require washing of the joint surface, in order to remove debris from the top surface of the joint material.

Overhang where the cable-stays connect into the bridge deck including the cable-stays 10 ft. vertically above the deck.

### **5.0 Special Notes for Bridge A5585.**

A bike path is present on the north side of the WB structure. The bike path supports and associated connections shall be washed from the exterior of the support to a point at least 5 ft. along the tie girder from the support connection. See as-built sheet 5 of 5 of Part 1 for details.

Enclosed drain piping systems are required to be flushed. All open drains, troughs, diapers, or scuppers shall be washed to insure no clogging in any open drain.

The bike path on the north side of WB A5585 **is capable of supporting** an aerial under bridge inspection vehicle, up to a model A62 Aspen Aerial unit.

### **5.1 Special Notes for Bridge A6500.**

Enclosed drain piping systems are required to be flushed. All open drains, troughs, diapers, or scuppers shall be washed to insure no clogging in any open drain.

**6.0 Equipment Performance Requirements.** Water flushing shall be performed such that all loose debris is removed, and no damage occurs to bridge components, paint/coatings, or adjacent roadway, shoulder or embankment. Provisions shall also be made to prevent damage to the existing enclosed drainage system. Any damage caused by the Contractor's operation shall be repaired at the sole expense of the Contractor. No debris accumulations shall remain on the adjacent portion of bridge structures as a result of the contractor's operation. Water flushing is required to remove chloride salts, however additional measures are allowable to insure removal of debris. The Contractor shall utilize a minimum 100 psi water pressure, as measured at the cleaning surface, in order to remove all loose debris. Access equipment and methods shall be required in order to reach all noted components with pressure washing equipment. Water, essentially potable water, shall be used for all washing and shall comply with JSP – Restrictions for Migration Birds, Section 3.2.

**6.1** It is recommended that the contractor use a top-down approach to avoid having to repeat bridge washing/cleaning activities. As part of this, the contractor shall start on the inside shoulder of Bridge A6500 (I-70 over the Mississippi River) and work to the outside shoulder based upon the typical bridge section within the as-builts, unless the cross slope of the roadway/structure slopes down to the inside median, which is the case at the beginning of the EB I-70 structure. For Bridge A5585, the contractor will need to close 3 lanes in order to begin the washing of debris/chloride salts from the crown of the roadway/bridge to the shoulder line.

**6.2** With the working hours noted above within the Workzone Management JSP and the length of the structures to be washed/cleaned on this project, **it is recommended that the contractor provide sufficient mobile lighting during construction operations** as to void having to repeat bridge washing/cleaning activities along with improved safety for the workers.

**7.0 As-built Plans.** Pertinent as-built plans for each structure have been included within the Electronic Deliverables. The contractor may request full as-builts **after** award from the project contact listed within JSP – Project Contact for Contractor/Bidder Questions.

**8.0 Method of Measurement.** No measurement will be made by the Engineer of the area to be washed for each structure within this contract.

**9.0 Basis of Payment.** Payment for bridge washing as described within this provision shall include all material, water, equipment, tools, labor and work incidental thereto, and shall be completely covered for the following pay items:

Item No.	Unit	Description
703-99.01	Lump Sum	Bridge Washing (Br. A5585 – EB MO 364)
703-99.01	Lump Sum	Bridge Washing (Br. A5585 – WB MO 364)
703-99.01	Lump Sum	Bridge Washing (Br. A6500 – EB & WB I-70)

I. Restrictions for Migratory Birds NJSP-16-06A

**1.0 Description.** Swallows or other bird species protected by the Migratory Bird Treaty Act may be nesting under the bridge or bridges that will be repaired under this contract.

**2.0 Restrictions.** To comply with the Migratory Bird Treaty Act, nests of protected species cannot be disturbed when active (eggs or young are present). Generally, nests are active between April 1 and July 31, but active nests can be present outside of these dates.

**3.0 Avoidance Measures.** The contractor shall not disturb active nests or destroy adults, eggs or young birds. In an effort to comply with the Migratory Bird Treaty Act, the contractor operations will be limited to the options established in the following sections.

**3.1 Inactive or Partially Constructed Nests.** If nests are present and MoDOT determines that the nests are inactive or partially constructed, the contractor may remove the nests provided that the colony's inactive or partially constructed nests are completely removed by March 15 and the contractor maintains a nest free condition until the bridge work is complete. Dry removal methods shall be used when practicable. If dry removal is not practicable, hydro cleaning may be used if approved by the Engineer and only if water is free of blasting grit, chemicals, or detergents, and applied using pressure less than 5,000 PSI. Clean water such as that from municipal water treatment plants or wells shall be used. Use of source water from Waters of the State (i.e., streams or lakes), is allowable, if the appropriate methods to prevent the possible spread of invasive aquatic species are implemented.

**3.2 Water and Equipment Used for Hydro cleaning.** Aquatic invasives such as zebra mussels and some algae species have infested several bodies of water in the United States and can be transported by vessels (barges, boats, tugs, tankers, etc.) and equipment (tanks, tubing, pumps, etc.) that have been used in areas that contain these invasive species. If equipment is not properly inspected and treated to prevent the spread of invasives, these species can be introduced into areas not currently known to have a population. These invasive species are detrimental to existing ecosystems and can outcompete native species. To assist in preventing the introduction and spread of aquatic invasive species through MoDOT projects in Missouri streams and lakes, the following precautions shall be followed.

**3.2.1 Use of Water from Streams, Lakes or Ponds.** Contractors shall not use water for nest removal from streams, lakes or ponds, unless they have implemented appropriate methods to prevent the possible spread of invasive aquatic species. Water sources from municipal water

treatment plants or wells may be used without following these measures provided the equipment to be used has not previously contained waters from streams, lakes or ponds. If the equipment has previously contained waters from other streams or lakes, the following measures must be implemented prior to use.

**3.2.1.1 Equipment Washing.** Prior to the use or re-use of equipment following any use with water from streams, lakes or ponds, all equipment shall be washed and rinsed thoroughly with hard spray (power wash) and hot (minimum 120° F) water, for at least one minute.

**3.2.1.2 Equipment Treating or Drying.** Equipment shall be treated or dried in one of the following manners.

**3.2.1.2.1** Equipment interior and/or other surfaces shall be treated with a 10% bleach solution to kill any aquatic nuisance species. This solution must also be run through all intake lines and hoses, to sterilize interior components. When chlorine treatment is used, all chlorine runoff from equipment washing must be collected and properly treated and/or disposed of in accordance with Sec 806.

**3.2.1.2.2** Equipment interior and/or other surfaces shall be treated with 140° F water for a minimum of 10 seconds contact on all surfaces. 140 ° F water must also be run through all intake lines and hoses, to purge any standing water.

**3.2.1.2.3** Equipment shall be flushed of all non-municipal water, and dried thoroughly, in the sun before using in or transporting between streams and lakes. Dry times will depend on the season the equipment is being used. Equipment must dry a minimum of 7 days for June-September, 18 days for March-May; 18 days for October-November, and 30 days for December-February. The drying method should be reserved as a last resort option.

**3.2.2** Prior to use of equipment, contractors shall provide the MoDOT inspector written documentation of the equipment's geographic origin (including the water body it was last used in), as well as defining the specified treatment method used to adequately ensure protection against invasive species. The written documentation will include a statement indicating the contractor is aware of these provisions and will also treat the equipment appropriately after completion of the project.

**3.3 Active Nests.** The contractor may work on the bridge if active nests are present, as long as the work does not impact or disturb the birds and/or nests. At a minimum, work shall not be performed within 10 feet of an active nest; however, the contractor is responsible for ensuring their activities do not impact the nests, eggs, or young.

**4.0 Additional Responsibilities.** If active bird nests remain after all reasonable avoidance measures have been taken, or if bird nests are observed during project construction, the contractor shall notify the Resident Engineer and contact the MoDOT Environmental Section (573-526-4778) to determine if there are other allowable options.

#### J. NTCIP Compliant Changeable Message Sign Requirements

**1.0 Description.** All solar powered changeable message signs, hereinafter referred to as a CMS, shall be in accordance with these specifications.

**2.0 Material.** Each CMS shall consist of an all LED (light emitting diode) matrix message board, solar/battery power supply and a user-operated interface, as specified, all mounted on a heavy duty, towable trailer.

**2.1** Each CMS shall be either Full Matrix or Character Matrix, and have the following minimum characteristics:

- (a) Full Matrix - Each CMS shall be the Full Matrix type with the capability of providing one, two, and three lines of individual changeable characters with minimum heights of 52 (1300), 28 (700), and 18 (450) inches (mm), respectively. Full Matrix signs shall be capable of both static and dynamic graphics, and full display sized messages.
- (b) Character Matrix (Three Line) – Each CMS shall consist of a minimum of three lines containing eight individual changeable characters per line. Each character shall be a minimum of 12 inches wide and 18 inches (450 mm) high.
- (c) Sign firmware shall comply with the current FHWA and DOT (Department of Transportation) NTCIP standards and support all NTCIP mandatory objects.
- (d) The sign controller shall be remotely accessible by the MoDOT St Louis District Transportation Management Center (TMC) through the Commission's ATMS (Advanced Traffic Management System) software, currently TransSuite provided by TransCore. The contractor will be responsible for ensuring the CMS is added to the ATMS software.
- (e) The CMS shall have a cellular data modem compatible with the district's current cellular IP (packet data) service provider and be capable of allowing the MoDOT St Louis District TMC ATMS software to have full control of the NTCIP compliant CMS controller remotely. Modem shall be capable of being programmed with a static IP.
- (f) The sign shall have a GPS unit that can assist in locating the sign's position when polled by the TMC. The GPS unit must be remotely accessible by the TMC and be part of or work with the provided communication modem.
- (g) Physical access to the onboard computer shall be protected by a padlock or other locking handle mechanism. Electronic access to the onboard computer shall be protected by a username and password.

**2.2** Full matrix CMS and character matrix CMS shall meet the following:

- (a) The overall sign dimensions shall not be less than 72 inches (1800 mm) high x 126 inches (3150 mm) wide.
- (b) The CMS shall be legible up to a distance of 650 feet (200 m) for both day and night operations and shall be visible for ½-mile (800 m) with 18 inch (450 mm) characters.
- (c) When fully raised in the display position, the bottom of the CMS board shall be at least a height of 7 feet (2100 mm) from the ground and shall be able to rotate a complete 360 degrees atop the lift mechanism. A sight tube, used to aim the CMS board to oncoming traffic, shall be installed on the CMS board or mast. The CMS shall have an electrical-hydraulic lifting mechanism that includes a manual lifting and lowering relief mechanism

as a backup. It also must be able to be locked into various viewing angles as determined best for the motorists by the CMS operator.

- (d) All LED displays and control circuitry shall be operational from -20 F (-29 C) to 120 F (50 C). The LED's shall have a rated life of 100,000 hours. The LED's shall be ITE amber in color on a flat black background.
- (e) The CMS face shall be constructed that if an individual panel or pixel fails the rest of the face shall continue to display the message.
- (f) All costs and coordination needed for testing to verify modem communication, sign NTCIP compliance, remote GPS status polling, ability to control the sign via the St Louis District's ATMS software provided by TransCore shall be the sole responsibility of the Contractor. Full integration into TransCore's ATMS shall be completed at least 5 business days prior to use of the CMS in the project. TransCore contact information will be provided to the contractor by contacting MoDOT's Gateway Guide staff at 314-275-1526 or via email at ggtech@modot.mo.gov with details of the request. No other support shall be provided by MoDOT other than TransCore contact information. Information provided shall include, at a minimum, CMS make and model, IP address, and proposed locations and messages.
- (g) The Contractor shall be responsible for all monthly cellular service fees for the duration of the project.
- (h) The unit shall be able to withstand a 65-mph (105-kmph) maximum road wind speed. The trailer shall be able to support the fully extended CMS board in an 80-mph (130-kmph) wind load.
- (i) Solar charging system shall allow for total autonomy of 24/7/365 continuous operation.
- (j) All exterior surfaces except the sign face shall be cleaned, primed, and finished with two coats of Highway Safety Orange and the sign interior itself shall be cleaned and finished with one coat of corrosion inhibiting primer and two coats of flat black. The sign face shall be covered with a rigid translucent material to prevent damage to the sign face caused by the environment.

**3.0 Construction Requirements.** Prior to placing a CMS on a project, the engineer shall verify proposed CMS location is void of conflict with another DMS or CMS locations presently established. If a conflict is present, the engineer shall contact the Traffic Management Center (TMC) at 314-275-1526 to mitigate. If no conflict is present, engineer shall provide Traffic Management Center (TMC) with the Job Number, Route, County, specific CMS location, and a CMS identification number that is permanently affixed to the CMS. The engineer and contractor shall verify the message displayed on board is compliant with CMS messaging policies. The contractor shall place the CMS 6 feet [2 meters] off of the right edge of shoulder at the location shown on the plans or as directed by the engineer. The CMS shall be placed so that the right side of the unit is advanced approximately 3 degrees ahead with the direction of traffic. CMS shall not be located in medians. CMS shall be delineated with a minimum of five non-metallic channelizing devices. Installation, including location and placement, shall be approved by the engineer. If needed, the contractor shall relocate the CMS as directed by the engineer.



**3.1** When not in use, the CMS shall be stored no closer than 30 feet [10 meters] to the edge of pavement carrying traffic, unless it is in a properly protected area or an off-site storage area or as otherwise directed by the engineer.

**4.0 Basis of Payment.** All expenses incurred by the contractor in integrating, maintaining, relocating, operating and protecting the changeable message signs as outlined above shall be paid for at the contract unit price for Item 616-99.02 Changeable Message Sign, Contractor Furnished and Retained, per Each.

**4.1** Cost for channelizers shall be included in the contract unit price for CMS.

**4.2** Cost for cellular phone hookup and monthly usage fee for the duration of the project shall be included in the contract unit price for CMS.

Item No.	Type	Description
616-99.02	Each	NTCIP COMPLIANT CHANGEABLE MESSAGE SIGN (CONTRACTOR FURNISHED AND RETAINED)

K. Temporary Traffic Control

**1.0 Description.** All work necessary to maintain safe and efficient traffic flow through the work areas shall be provided by the contractor. This will include furnishing, relocating, and removing temporary traffic control devices, truck mounted attenuators and equipment, and the removal and relocation or covering and uncovering of existing signs and other traffic control devices in accordance with the contract documents or as directed by the engineer.

**2.0 Work requirements.** Work shall be in accordance with Sec 616, Sec 612, and the contract plans.

**3.0 Method of Measurement.** The quantities shown on the plans shall be considered an estimate and may be subject to change based on field conditions. This work will not be measured for payment, but will be considered a lump sum unit. Any Value Engineering proposals to the temporary traffic control will not be paid through value engineering but will be covered under:

Item No.	Unit	Description
616-99.01	Lump Sum	Temporary Traffic Control

**4.0 Basis of Payment.**

**4.1** Partial payments will be made as follows:

- (a) The first partial payment will be made when five percent of the original contract amount is earned. This payment will be the lesser of 50 percent of the contract price for the item of temporary traffic control or 5 percent of the original contract price.
- (b) The second partial payment will be made when 50 percent of the original contract amount is earned. This payment will be the lesser of 25 percent of the original contract price for the item of temporary traffic control or 2.5 percent of the original contract price.

- (c) The third partial payment will be made when 75 percent of the original contract amount is earned. This payment will be the lesser of 20 percent of the original contract price for the item of temporary traffic control or 2 percent of the original contract price.
- (d) When the engineer has accepted the contract for maintenance in accordance with Sec 105, the remaining contract price for the item of temporary traffic control will be paid.
- (e) The above partial payment schedule may be adjusted by the engineer if proof of invoices submitted by the contractor demonstrate additional temporary traffic control costs were incurred earlier than the above proposed schedule. The total payment for temporary traffic control will not exceed the bid amount for Temporary Traffic Control, lump sum, unless covered by a cost change order as referenced in the following Section 4.3.

**4.1.1** For the purposes of this provision, the term “original contract price” will be construed as the total dollar value of the construction items (excluding temporary traffic control) of the original contract.

**4.2** Temporary traffic control will be paid for at the contract lump sum price for Item 616-99.01, Temporary Traffic Control. No direct payment will be made for the following:

- (a) Incidental items necessary to complete the work, unless specifically provided as a pay item in the contract.
- (b) Installing, operating, maintaining, cleaning, repairing, removing or replacing traffic control devices.
- (c) Covering and uncovering existing signs and other traffic control devices.
- (d) Relocating temporary traffic control devices, including permanent traffic control devices temporarily relocated, unless specifically included as a pay item in the contract.
- (e) Providing channelizers.
- (f) Worker apparel.
- (g) Flaggers, pilot vehicles, and appurtenances at flagging stations.
- (h) Furnishing, installing, operating, maintaining, and removing construction-related vehicle and equipment lighting.
- (i) Construction and removal of temporary equipment crossovers, including restoring pre-existing crossovers.
- (j) Removing existing pavement markings, and removing and relocating temporary pavement markings as necessary for staging operations. Removal of pavement markings shall not mar the surface of permanent concrete pavement.

**4.3** Any additional work deemed necessary by the engineer that requires temporary traffic control and is not covered by the contract plans will be included in the cost change order for the additional work. However, if the added work is required in a stage where temporary traffic control is already in place, no additional traffic control pay will be allowed in this case.

## **L. Union Pacific Railroad Requirements**

### **1.0 Introduction.**

**1.1** These Railroad Requirements set forth terms and conditions agreed between the Union Pacific Railroad Company (Railroad) and the Missouri Highways and Transportation Commission (Commission), under which the Railroad will allow the Commission's contractors to enter in and upon the Railroad's real property, right of way, tracks and other facilities (Railroad's Property) to perform the contractor's work relating to this project.

**1.2** To report an emergency on the Railroad, call: (888) 877-7267.

**1.3** The project location is at Railroad Milepost 279.33 on Railroads Springfield Subdivision, designated as USDOT Crossing # 922 514YH. **Current FRA data shows 10 daytime trains, 5 nighttime trains, 4 switching trains and 10 passenger trains per day.**

**1.4** Definitions of terms set forth in the current edition of the Missouri Standard Specifications for Highway Construction shall be applicable to those terms as used in these Railroad Requirements.

### **2.0 Authority of Railroad Representative and Engineer.**

**2.1** The authorized representative of the Railroad, herein called "Railroad Representative", 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.

**2.1.1** The Railroad designates the following individual as the Railroad Representative for this project. Except as otherwise provided in these Railroad Requirements, the contractor shall address all notices concerning this project to the Railroad Representative, as follows:

Ms. Melinda DuBay,  
Engineering Design - Public Projects  
Union Pacific Railroad Company  
1400 Douglas, MS 0910  
Omaha, NE 68179  
Telephone: (402) 544-3992  
E-mail: [msdubay@up.com](mailto:msdubay@up.com)

**2.1.2** The Railroad, or the individual identified above, may designate a different individual to act as the Railroad Representative for this project, and may change the address information stated above, by giving written notice of the changes to the contractor and to the Engineer, as provided in these Railroad Requirements.

**2.2** The authorized representative of the Commission (Engineer) shall have authority over all other matters as prescribed herein and in the project specifications.

### **3.0 Contractor's Indemnity Obligations to the Railroad.**

**3.1** The contractor agrees to indemnify, defend and hold harmless the Railroad from and against any injury or death of persons whomsoever, or from any loss or damage to the Railroad's Property, caused by acts or omissions of the contractor in performing work on this project, whether on, over, under or in the vicinity of the Railroad's Property. In the event the contractor shall fail to restore the Railroad's Property immediately to a condition acceptable to the Railroad when any such loss or damage to the Railroad's Property is called to the contractor's attention by the Railroad, then the Railroad may perform such corrective work at the cost of the contractor. The Railroad shall have the right to bring an action directly against the contractor to recover any loss or damage sustained by the Railroad by reason of the contractor's breach of agreements contained in these Railroad Requirements. In addition to such remedies of the Railroad, the Commission will withhold from final payment due to the contractor the amount reasonably necessary to reimburse the Railroad for such loss or damage or for performing such work. The term "loss or damage" as used herein shall include, but not be limited to, the erosion and silting of, water damage to, and the accidental or intentional placing or dropping of objects on the Railroad's Property.

### **4.0 Notice of Starting Work.**

**4.1** The contractor shall not commence any work on the Railroad's right of way until contractor has complied with the following conditions (no particular order):

**4.1.1** At least ten (10) days in advance of the date the contractor proposes to begin work on the Railroad's Property, the contractor has given written notice of the contractor's proposed start date and time to the Railroad Representative, and Railroad's Manager of Track Maintenance (see paragraph 12.2.3 below), with a copy to the Engineer.

**4.1.2** The Commission has obtained written approval from the Railroad's Representative for the contractor's insurance coverage as required by Section 17 of these Railroad Requirements, and authorization for the contractor to begin work on the Railroad's Property.

**4.1.3** The contractor has determined whether fiber optic cable systems are buried on the Railroad's Property. If fiber optic cable systems are buried on the Railroad's Property, then the contractor has contacted the Railroad at the 24 hour number, 800-336-9193, has contacted the telecommunications company involved, has arranged for a cable locator, and has made arrangements for relocation or other protection of the fiber optic cable system on the Railroad's Property.

**4.1.4** The contractor's employees, representatives or agents who are regularly assigned to perform work on the Railroad's Property have been certified as having completed the Internet Safety Orientation available at [www.contractororientation.com](http://www.contractororientation.com). This certification shall be renewed annually. In addition the contractor shall require that every employee, representative or agent who is not regularly assigned to perform work on the Railroad's Property has received appropriate safety training before performing any work on the Railroad's property. The cost of the Internet Safety Orientation, which is subject to change, is currently \$11 per person per year.

**4.2 Right of Entry.** At least thirty (30) days in advance of the date the contractor proposes to begin work on the Railroad's Property, the contractor shall enter into a Contractor's Right of

Entry Agreement (CROE) with Railroad prior to working on Railroad property. Submit the following information to the Railroad Representative:

- a. MoDOT manager contact information
- b. Contractor contact information
- c. Site location (include address, DOT#)
- d. Site map
- e. Brief description of scope of work
- f. Proposed schedule for work on UP right of way

**4.2.1** After reviewing the information, the Railroad Representative will send all of the information to UP Real Estate for processing. UP Real Estate will draft the CROE agreement and send it to the contractor for signature. The signed contract and administrative fee must then be returned to UP Real Estate.

**4.2.2** Administrative Fee. Upon the execution and delivery of this CROE agreement, Contractor shall pay the Railroad One Thousand twenty-five Dollars (\$1,025) as reimbursement for clerical, administrative and handling expenses in connection with the processing of this CROE agreement.

**4.2.3** If applicable to the project, the contractor must submit a demolition and falsework plan as well as means and methods to the Railroad for review and approval. These plans can be submitted along with the Right of Entry application; however the Right of Entry will not be approved until the demolition and falsework plan is approved by the Railroad.

## **5.0 Interference with Railroad's Operations.**

**5.1** The Railroad's right of way is located within the limits of this project. The contractor shall take care to insure that it will not drop any debris or material on the Railroad's Property.

**5.2** The contractor shall arrange and conduct all of the contractor's work so that it causes no interference with the Railroad's operations, including train, signal, telephone, telegraphic services, damage to the Railroad's Property, poles, wires and other facilities of tenants on the Railroad's Property. Whenever the contractor's work may directly affect the operations or safety of trains, the contractor shall submit a written description of the method of doing such work to the Railroad Representative for approval, but such approval shall not relieve the contractor from liability resulting from the contractor's work. Any work to be performed by the contractor that requires flagging service shall be deferred by the contractor until the flagging services are available at the job site.

**5.3** Whenever the contractor's work upon the Railroad's Property will unavoidably cause an impediment to the Railroad's operations, such as requiring the use of runaround tracks or reduced train speed, the contractor should schedule and conduct these operations so that this impediment is reduced to the absolute minimum.

**5.4** If conditions arising from, or in connection with the work require immediate and unusual provisions to protect the Railroad's operations and property, the contractor shall make such provisions. If in the judgment of the Railroad Representative, or the Engineer if the Railroad Representative is absent, such provision is insufficient, then the Railroad Representative or Engineer may require or provide such provisions as he/she deems necessary. In any event, the

contractor shall make such provisions at the contractor's expense, and without cost to the Railroad or the Commission.

## **6.0 Track Clearances.**

**6.1** During construction, the contractor shall maintain not less than the minimum track clearances as shown on the project plans. However, before undertaking any work within the Railroad's Property and before placing any obstruction over any track, the contractor shall:

**6.1.1** Notify the Railroad Representative and the Railroad's Manager of Track Maintenance at least ten (10) days in advance of the proposed work.

**6.1.2** Receive assurance from the Railroad's Manager of Track Maintenance that arrangements have been made for flagging service as may be necessary.

**6.1.3.** Receive permission from the Railroad Representative to proceed with the work, as provided in section 4.0.

**6.1.4.** Confirm that the Engineer has received copies of the contractor's notice to the Railroad, and of the Railroad's response.

## **7.0 Construction Procedures.**

**7.1. General.** The contractor's work on the Railroad's property shall be:

**7.1.1** Subject to the Railroad's inspection and review.

**7.1.2** Performed in accordance with these Railroad Requirements.

**8.0 Maintenance of Railroad Facilities.** Within the project limits, the contractor shall maintain Railroad's Property, including all ditches and drainage structures, free of silt or other obstructions that may result from contractor's operations. The contractor shall promptly repair eroded areas within the Railroad's Property and repair any other damage to the Railroad's Property or the Railroad's tenants. The contractor shall perform all such maintenance and repair of damages due to the contractor's operations at the contractor's expense.

## **9.0 Storage of Materials and Equipment.**

**9.1** The contractor shall obtain permission from the Railroad Representative before storing any materials or equipment anywhere on Railroad's Property. The Railroad will not be liable for damage to such material and equipment from any cause, and the Railroad Representative may move such material and equipment or require the contractor to move it, at the contractor's expense.

**9.2** The contractor shall not leave unattended any grading or construction machinery parked upon Railroad's Property, unless it is effectively immobilized so that unauthorized persons cannot move such machinery.

**10.0 Cleanup.** Upon completion of the work, the contractor shall remove from within the limits of the Railroad's Property all machinery, equipment, surplus materials, falsework, rubbish or

temporary buildings of the contractor's and shall leave Railroad's Property in a neat condition satisfactory to the Railroad Representative.

**11.0 Damages.** The Railroad shall not assume liability for any damages to the contractor, contractor's work, employees, servants, equipment and materials caused by the Railroad's traffic. However, the preceding sentence shall not exempt the Railroad from liability for any loss, damage or injury proximately caused by the Railroad's intentional misconduct or sole or gross negligence. The contractor shall directly reimburse the Railroad for any cost the Railroad reasonably incurs for repairing damages to the Railroad's Property or to property of the Railroad's tenants, caused by or resulting from the operations of the contractor relating to this project.

## **12.0 Flagging Services.**

**12.1 When Flagging is Required.** The Railroad has sole authority to determine the need for flagging to protect the Railroad's operations. Whenever the Railroad requires flagging services with reference to any of the contractor's work on this project, the contractor shall not perform any such work until all required flaggers are present at the job site.

**12.1.1** In general, the Railroad may require flagging services whenever the contractor's personnel or equipment are, or are likely to be, working on the Railroad's Property, 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, to prevent unreasonable risks of accidental hazard to the Railroad's operations or personnel.

**12.1.2** 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 the Railroad may assign up to three flaggers. However, if the contractor works within distances that violate instructions given by the Railroad Representative, or performs work upon or adjacent to Railroad's Property that has not been scheduled with the Railroad Representative, the Railroad may require flagging services full time until the project is completed.

**12.1.3** If flagging is determined to be required by the Manager of Track Maintenance (MTM), and the MTM advises that third party flagging is to be used, then third party flagging must be used. If flagging is determined to be required by the MTM and the MTM advises that an agreement employee flagging is to be used, then an agreement flagger will be put up for bid (and scheduled accordingly).

## **12.2 Scheduling and Notification of Flagging Services.**

**12.2.1** The contractor shall arrange with the Railroad all flagging services required by the Railroad to accomplish the contractor's work on this project.

**12.2.2** Before the contractor begins work on the Railroad's Property, the contractor shall furnish to the Railroad Representative and the Engineer a schedule for all work required to complete the contractor's portion of the project within the Railroad's Property, and shall arrange for a job site meeting between the contractor, the Engineer, and the Railroad Representative. Until the contractor has provided its work schedule and met on-site with the Railroad Representative and the Engineer, the Railroad may withhold all flagging services from the contractor's proposed job site.

**12.2.3** Before the contractor first begins any work upon or adjacent to the Railroad's Property, the contractor shall give not less than thirty (30) days advance notice to the Railroad, and to the Engineer, of its intent to begin such work. The contractor shall address all notices relating to flagging as instructed in the fully executed CROE agreement.

Justin Mock - Manager of Track Maintenance  
618-231-5288

**12.2.4** The Railroad usually assigns one flagger to work at the job site on a continuous basis until the contractor no longer needs flagging services. The contractor shall not call for flagging services on a spot basis. The Railroad's assigned flagger shall notify the Engineer when flagging services have begun and ended. The flagger shall give these notices immediately upon arrival at the job site on the first day, and before departing from the job site on the last day of each separate period when the Railroad provides flagging services, or as soon as possible thereafter. The Engineer shall document these notifications in the project records.

**12.2.5** After the contractor has begun work that requires flagging services, the contractor shall give not less than ten (10) day's advance written notice to the Railroad before discontinuing flagging services and terminating the obligation to pay for flagging services. The contractor shall simultaneously provide a copy of this notice to the Engineer. If the contractor's work on or adjacent to the Railroad's Property is suspended at any time, or for any reason, then before the contractor resumes any work on or adjacent to the Railroad's Property, the contractor shall give advance, written notice to the Railroad and to the Engineer of its intent to resume such work. This notice shall provide sufficient details of the contractor's proposed work to enable the Railroad Representative to determine whether flagging services will be required before the contractor resumes its work on or adjacent to the Railroad's Property. The contractor shall give this required notice at least three (3) working days' before it intends to resume such work; however, The Railroad may take up to thirty (30) days after the contractor has given this notice before resuming flagging services at the job site. The requirements of this paragraph 12.2.5 shall not apply if the suspension and resumption of the contractor's work were previously scheduled with the Railroad pursuant to paragraph 12.2.2 of these Railroad Requirements, or the suspension was caused by an emergency as provided in paragraph 12.2.6 of these Railroad Requirements.

**12.2.6** If, after the Railroad has assigned a flagger to the project site in accordance with section 12.0, any emergency requires the flagger's presence elsewhere, then the contractor shall suspend work on the Railroad's Property until the flagger is again available. Any additional costs to the contractor resulting from such delay shall be borne by the contractor and not by the Railroad.

### **12.3 Payment for Flagging Services.**

**12.3.1** The Commission will pay the Railroad directly for the cost of flagging services associated with this project by deducting the amount from the Commission's payments to the contractor. If a third-party flagger is used, the contractor has the option to pay the flagger directly but must notify the MoDOT Engineer of such payments for flagging.

**12.3.2** The estimated cost of flagging services is approximately \$1,400 per day, based on an 8-hour work day and a 40-hour work week. The Railroad shall charge not more than its actual cost of providing these flagging services, which includes the base pay for the flagger or flaggers who actually performed the required flagging services, the Railroad's reasonable overhead



costs, and the reasonable costs actually incurred for the flagger's travel expenses, meals and lodging if required. The Railroad may charge a maximum of one hour of travel time each way per day per flagger, for travel to and from the job site. A flagger's work in excess of 8 hours per day or 40 hours per week, but not more than 12 hours per day, will result in overtime pay at 1.5 times that employee's regular hourly rate. A flagger's work in excess of 12 hours per day will result in overtime pay at 2.0 times that employee's regular hourly rate. If a flagger performs required flagging services on a holiday, then the overtime pay rate shall be 2.5 times that employee's regular hourly rate. The Commission also shall reimburse the Railroad for its actual expenses reasonably incurred in preparing and handling invoices to the Commission for the cost of these flagging services. The Railroad's charges to the Commission shall comply with applicable provisions of the current Federal Aid Policy Guide issued by the Federal Highway Administration.

**12.3.3** The Railroad shall submit progress invoices to the Engineer during the time the Railroad requires flagging services. The Railroad shall submit its final invoice for flagging services to the Engineer within one hundred eighty (180) days after the contractor has notified the Railroad and the Commission that all its work over the Railroad's Property is complete, in accordance with section 18.0 below. If the Commission does not receive the Railroad's final flagging invoice within this time period, then the Railroad shall obtain payment directly from the contractor.

**12.3.4** If a dispute arises between the Railroad, the Commission and the contractor concerning the amount charged for flagging service, then the Commission may deduct the full amount of the Railroad's invoice from the contractor's payment until the dispute is resolved.

**12.4 Flagging Complaints.** The contractor and the Railroad shall attempt to resolve any complaints concerning flagging services in a timely manner. If the contractor disputes the need for a flagger, the contractor shall notify the Railroad Representative and the Engineer. The contractor shall confirm any verbal complaints in writing within five (5) working days, by sending a copy to the Railroad Representative and to the Engineer.

### **13.0 Haul Across Railroads.**

**13.1** Where the plans show or imply that the contractor must haul materials of any nature across a Railroad, unless the plans clearly show that the Commission has included arrangements for such haul in the agreement with the Railroad, the contractor shall make all necessary arrangements with the Railroad regarding means of transporting such materials across the Railroad. The Railroad need not construct a haul road for the contractor unless no other alternate means is available to the contractor. The contractor shall bear all costs incidental to such crossings, including flagging, whether services are performed by contractor's own forces or by the Railroad's personnel. The contractor shall execute the Railroad's standard Road Crossing Agreement covering terms and conditions for the temporary crossing.

**13.2** Neither the contractor nor the Railroad shall construct any crossing for use by the contractor for transporting materials or equipment across the tracks of the Railroad until the Railroad Representative specifically authorizes the installation, maintenance, necessary watching and flagging thereof and removal, which shall be done at the contractor's expense.

**14.0 Work for the Benefit of the Contractors.** The project plans show all temporary or permanent changes in wire lines or other facilities that are necessary to complete the project, or these changes will be covered by appropriate plan revisions approved by the Commission and

the Railroad. If the contractor desires any further changes, the contractor shall make separate arrangements with the Railroad for those changes, at the contractor's expense.

**15.0 Cooperation and Delays.** The contractor shall arrange a schedule with the Railroad for accomplishing staged construction involving work by the Railroad or tenants of the Railroad. In arranging a schedule, the contractor shall request information from the Railroad, and the Railroad shall promptly provide information, concerning the minimum lead time required for assembling crews and materials. The contractor shall schedule adequate time for those activities. The contractor shall not make any claim against the Railroad for hindrance or delay on account of railway traffic for:

**15.1** Any work the Railroad performs.

**15.2** Other delay incident to or necessary for the safe maintenance of railway traffic.

**15.3** Any delays due to compliance with these Railroad Requirements.

**16.0 Trainman's Walkways.** The contractor shall maintain along the outer side of each exterior track of multiple operated tracks, and on each side of single operated track, an unobstructed continuous space suitable for trainman's use in walking along trains, extending to a line not less than 12 feet from the centerline of the track. Before the close of each work day, the contractor shall remove all temporary impediments to walkways and track drainage encroachments or obstructions that were allowed during work hours when flagging services were available. Whenever the contractor excavates or maintains any excavation near the walkway, the contractor shall install a handrail with 12 feet minimum clearance from the centerline of the track.

## **17.0 Insurance.**

**17.1 General Insurance Provisions.** The contractor shall, at its sole cost and expense, procure and continuously maintain in force during this project, the insurance coverage required under this section 17 until the contractor has completed all project work on the Railroad's Property, has removed all equipment and materials from the Railroad's Property, and has cleaned and restored the Railroad's Property to the satisfaction of the Engineer and the Railroad Representative. The amount of work to be performed upon, over or under the Railroad's Property is estimated to be 2.2 percent (2.2%) of the contractor's total bid for the project.

**17.2 Commercial General Liability Insurance.** The contractor shall maintain commercial general liability ("CGL") insurance with a limit of not less than \$5,000,000 for each occurrence and an aggregate limit of not less than \$10,000,000. CGL insurance must be written on ISO occurrence form CG 00 01 12 04 (or a substitute form providing equivalent coverage). The policy must contain the following endorsement, which must be stated on the certificate of insurance: "Contractual Liability Railroad's" ISO form CG 24 17 10 01 (or a substitute form providing equivalent coverage) showing "Union Pacific Railroad Company Property" as the Designated Job Site.

**17.3 Business Automobile Coverage Insurance.** The contractor shall maintain business auto coverage written on ISO form CA 00 01 (or a substitute form providing equivalent liability coverage) with a combined single limit of not less than \$5,000,000 for each accident. The policy must contain the following endorsements, which must be stated on the certificate of insurance:

"Coverage For Certain Operations In Connection With Railroad's" ISO form CA 20 70 10 01 (or a substitute form providing equivalent coverage) showing "Union Pacific Property" as the Designated Job Site; and Motor Carrier Act Endorsement - Hazardous Materials Clean Up (MCS-90) if required by law.

**17.4 Alternate Liability Insurance Limits.** Instead of the minimum limits of insurance coverage described above in subsections 17.2 and 17.3, Railroad will accept CGL insurance limits of at least \$2,000,000 for each occurrence or claim and an aggregate limit of at least \$2,000,000, and will accept Business Automobile Insurance containing a combined single limit of at least \$2,000,000 per occurrence or claim, if the contractor will secure Railroad Protective Liability Insurance coverage with a combined single limit of \$5,000,000 per occurrence and an aggregate limit of \$10,000,000. The contractor's election to maintain these alternate liability insurance limits shall not affect the applicability of any other terms and conditions set forth in these Railroad Requirements.

**17.5 Workers' Compensation and Employers' Liability Insurance.** The contractor shall maintain workers' compensation insurance coverage, with not less than the minimum statutory liability required under the workers' compensation laws of the State of Missouri. The contractor shall maintain Employers' Liability (Part B) insurance coverage with limits of at least \$500,000 for each accident, a \$500,000 disease policy limit, and \$500,000 for each employee. If the contractor is self-insured, then the contractor shall provide evidence of state approval and excess workers' compensation coverage, which must include coverage for liability arising out of the U. S. Longshoremen's and Harbor Workers' Act, the Jones Act, and the Outer Continental Shelf Land Act, if applicable. The policy must contain the following endorsement, which must be stated on the certificate of insurance: "Alternate Employer Endorsement" ISO form WC 00 03 01 A (or a substitute form providing equivalent coverage) showing the Railroad in the schedule as the alternate employer (or a substitute form providing equivalent coverage).

**17.6 Railroad Protective Liability Insurance.** The contractor must maintain Railroad Protective Liability insurance written on ISO occurrence form CG 00 35 12 04 (or a substitute form providing equivalent coverage) on behalf of the Railroad as named insured, with a limit of not less than \$2,000,000 per occurrence and an aggregate limit of \$6,000,000. Before commencing any work on the Railroad's Property, the contractor shall submit the original insurance policy to the Railroad, or may submit a binder stating that the required Railroad Protective Liability policy is in place until the contractor delivers the original policy to the Railroad. The contractor shall cause the Railroad Protective Liability Insurance policy to include a description of the named insured, the work, and the job site, as follows:

**17.6.1** Named Insured: Union Pacific Railroad Company.

**17.6.2** Description and Designation:

I-70, near Madison, Illinois

Bridge washing of the Stan Musial Veteran's Memorial Bridge over the UPRR at DOT # 922 541Y MP 279.33 Springfield Subdivision

MoDOT Project No. J6I3541

**17.7 Umbrella or Excess Insurance.** If the contractor utilizes umbrella or excess insurance policies, these policies must "follow form" and afford no less coverage than the primary policy.

**17.8 Pollution Liability Insurance.** The contractor shall maintain pollution liability insurance coverage, which must be written on ISO form Pollution Liability Coverage Form Designated

Sites CG 00 39 12 04 (or a substitute form providing equivalent liability coverage), with limits of at least \$5,000,000 per occurrence and an aggregate limit of \$10,000,000. If the scope of work as defined in this Project includes the disposal of any hazardous or non-hazardous materials from the job site, the contractor must furnish to the Railroad evidence of pollution legal liability insurance maintained by the disposal site operator for losses arising from the insured facility accepting the materials, with coverage in minimum amounts of \$1,000,000 per loss, and an annual aggregate of \$2,000,000.

## **17.9 Other Insurance Requirements.**

**17.9.1.** Each policy required above (except workers' compensation and employers' liability) must include the Railroad as "Additional Insured" using ISO Additional Insured Endorsements CG 20 26, and CA 20 48 (or substitute forms providing equivalent coverage). The coverage provided to the Railroad as an additional insured shall, to the extent provided under ISO Additional Insured Endorsement CG 20 26 and CA 20 48, provide coverage for the Railroad's negligence whether sole or partial, active or passive.

**17.9.2** Where allowable by law, the punitive damage exclusion shall be deleted, and the deletion shall be indicated on the certificate of insurance.

**17.9.3** The contractor waives all rights of recovery, and its insurers also waive all rights of subrogation of damages against the Railroad and its agents, officers, directors and employees, except that these waivers shall not apply to punitive damages, nor to any loss, damage or injury proximately caused by the Railroad's intentional misconduct or sole or gross negligence. The certificate of insurance shall acknowledge these waivers.

**17.9.4** Prior to commencing any work on the Railroad's Property, the contractor shall furnish the Railroad with one or more certificates of insurance, executed by a duly authorized representative of each insurer, showing compliance with the insurance requirements set forth in this Section 17.

**17.9.5** The contractor shall only obtain insurance policies written by a reputable insurance company acceptable to the Railroad, or which currently has a Best's Insurance Guide Rating of A- and Class VII or better, and which is authorized to do business in the State of Missouri.

**17.9.6** The fact that insurance is obtained by the contractor or by the Railroad on behalf of the contractor will not be deemed to release or diminish the liability of the contractor, including, without limitation, liability under the indemnity provisions contained in Section 1.4 of these Railroad Requirements. Damages recoverable by the Railroad from the contractor or any third party will not be limited by the amount of the required insurance coverage, except to the extent of any payments the Railroad has received pursuant to that insurance coverage.

**17.10 Evidence of Insurance.** The contractor shall provide evidence of insurance as required above to the addresses shown below, for review by the Commission and transmittal to the Railroad.

Railroad  
Mr. Casey Moore  
Real Estate  
Union Pacific Railroad Company  
1400 Douglas St., MS 1690

Commission  
Mr. Dave Ahlvers  
State Construction and Materials Engineer  
Missouri Department of Transportation  
P.O. Box 270

Omaha, NE 68179-1690

Jefferson City, MO 65102

**17.11** Except as otherwise specifically provided in these Railroad Requirements, the Railroad will not accept binders as evidence of insurance, and the contractor shall provide the Railroad with the original insurance policy.

**17.12 Insurance Required of Subcontractors.** If any part of the work is sublet, the contractor shall maintain and provide evidence of similar insurance, in the same amounts as required of the prime contractor, to cover the subcontractor's operations. The Railroad will accept endorsements to the prime contractor's policies specifically naming subcontractors and describing the subcontractor's operations, for this purpose.

**17.13 Cancellation of Insurance.** The contractor and its insurers shall not cancel any of the required insurance coverage, except by permission of the Commission and the Railroad, or after thirty (30) days' written notice to the Commission and the Railroad at the addresses shown in subsection 17.10.

**18.0 Completion of Work on Railroad's Property.** The contractor shall notify Engineer and Railroad's Representative when the contractor has completed its work on Railroad's Property.

**19.0 Failure to Comply.** If the contractor violates or fails to comply with any of the requirements of these Railroad Requirements, then the Railroad Engineer may require that the contractor vacate the Railroad's property and the Engineer may withhold all monies due to the contractor until the contractor has remedied the situation to the satisfaction of the Railroad Engineer and the Engineer.

**20.0 Payment for Cost of Compliance.** The contractor is not entitled to any separate payment for any extra cost it may incur on account of compliance with these Railroad Requirements. The contractor shall include all such costs in the contract unit price for items properly authorized in the contract.

**20.1** Estimate of potential costs include Engineering and other related services for work to be performed within railroad right of way. This includes but is not limited to railroad flagging services. All necessary railroad services will be billed at actual cost.

**Payment for flagging fees.**

Flagging at \$1,400 per day (as provided in paragraph 12.3.2 of these Railroad Requirements)

The above figure is for an estimate only and subject to change. The Railroad will bill for actual costs. Therefore, the contractor shall not solely rely on the estimates and make their own determination of costs for bidding purposes.

**20.1.1** 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 (Plan Submittal) is provided for all costs associated with the generation and submittal of plans required for the Railroad right of entry agreement.

M. Special Provisions for Protection of Norfolk Southern Railway Interest

**1.0 Authority of Railroad Engineer and Department Engineer:**

**1.1** The authorized representative of the Railroad Company, hereinafter referred to as Railroad Engineer, shall have final authority in all matters affecting the safe maintenance of Railroad traffic of his Company including the adequacy of the foundations and structures supporting the Railroad tracks. For Public Projects impacting Norfolk Southern, the Public Projects Engineer will serve as the Railroad Engineer.

**1.2** The authorized representative of the Department, hereinafter referred to as the Department 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 Norfolk Southern policies and procedures not specifically mentioned in these special provisions. These can be found in the Norfolk Southern Public Projects Guidelines at the link below:

<http://www.nscorp.com/content/nscorp/en/transportation-terms/other-requirements/public-project-guidelines.html>

**2.0 Notice of Starting Work:**

**2.1** Department's Prime contractor shall not commence any work on railroad rights-of-way until he has complied with the following conditions:

**2.1.1** Signed and received a fully executed copy of the required Norfolk Southern Contractor Non-Environmental Right of Entry Agreement obtained through the following link:

<http://www.nscorp.com/content/nscorp/en/real-estate/norfolk-southern-services/access-norfolk-southern-property.html>

There is a \$1,500 application review fee.

**2.1.2** Given the Railroad written notice in electronic format to the Railroad Engineer, with copy to the Department Engineer who has been designated to be in charge of the work, at least ten days in advance of the date he proposes to begin work on Railroad rights-of-way.

**2.1.3** Obtained written approval from the Railroad of Railroad Protective Liability Insurance coverage as required by paragraph 14 herein. It should be noted that Railroad Company does not accept notation of Railroad Protective insurance on a certificate of liability insurance form or Binders as Railroad Company must have the full original or certified true electronic countersigned policy submitted electronically to [NSRISK3@NSCORP.COM](mailto:NSRISK3@NSCORP.COM). Further, please note that mere receipt of the policy is not the only issue but review for compliance. Due to the number of projects system-wide, it typically takes a minimum of 30-45 days for Railroad Company to review.

**2.1.4** Obtained Railroad's Flagging Services as required by paragraph 7 herein.

**2.1.5** Obtained written authorization from the Railroad to begin work on Railroad rights-of-way, such authorization to include an outline of specific conditions with which he must comply.

**2.1.6** Furnished a schedule for all work within the Railroad rights-of-way as required by paragraph 7.2.2.

**2.2** The Railroad's written authorization to proceed with the work shall 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.

**2.3** Norfolk Southern representative contact information: Jake Watson, Public Projects Engineer, Telephone: 404-529-1225; email [Jacob.Watson@nscorp.com](mailto:Jacob.Watson@nscorp.com).

### **3.0 . Interference with Railroad Operations:**

**3.1** The Contractor shall so arrange and conduct his work that there will be no interference with Railroad operations, including train, signal, telephone and telegraphic services, or damage to the property of the Railroad Company or to poles, wires, and other facilities of tenants on the rights-of-way of the Railroad Company. Whenever work is liable to 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 which requires flagging service or inspection service shall be deferred by the Contractor until the flagging service or inspection service required by the Railroad is available at the job site.

**3.2** Whenever work within Railroad rights-of-way is of such a nature that impediment to Railroad operations such as use of runaround tracks or necessity for reduced speed is unavoidable, the Contractor shall schedule and conduct his operations so that such impediment is reduced to the absolute minimum.

**3.3** Should conditions arising from, or in connection with the work, require that immediate and unusual provisions be made to protect operations and property of the Railroad, the Contractor shall make such provisions. If in the judgment of the Railroad Engineer, or in his absence, the Railroad's Division Engineer, such provisions is insufficient, either may require or provide such provisions as he deems necessary. In any event, such unusual provisions shall be at the Contractor's expense and without cost to the Railroad or the Department.

**3.4.** "One Call" Services do not locate buried railroad utilities. The contractor shall contact the railroad's representative 2 days in advance of work at those places where excavation, pile driving, or heavy loads may damage railroad underground facilities. Upon request from the contractor or agency, railroad forces will locate and paint mark or flag railroad underground facilities. The contractor shall avoid excavation or other disturbances of these facilities. If disturbance or excavation is required near a buried railroad facility, the contractor shall coordinate with the railroad to have the facility potholed manually with careful hand excavation. The facility shall be protected by the contractor during the course of the disturbance under the supervision and direction of the railroad representative.

### **4.0 Track Clearances:**

**4.1** The minimum track clearances to be maintained by the Contractor during construction are shown on the Project Plans. If temporary clearances are not shown on the project plans, the following criteria shall govern the use of falsework and formwork above or adjacent to operated tracks.

**4.1.1** A minimum vertical clearance of 22'-0" above top of highest rail shall be maintained at all times.

**4.1.2** A minimum horizontal clearance of 13'-0" from centerline of tangent track or 14'-0" from centerline of curved track shall be maintained at all times. Additional horizontal clearance may be required in special cases to be safe for operating conditions. This additional clearance will be as determined by the Chief Engineer Bridges & Structures

**4.1.3** All proposed temporary clearances which are less than those listed above must be submitted to the Chief Engineer Bridges & Structures for approval prior to construction and must also be authorized by the regulatory body of the State if less than the legally prescribed clearances.

**4.1.4** The temporary clearance requirements noted above shall also apply to all other physical obstructions including, but not limited to: stockpiled materials, parked equipment, placement or driving of piles, and bracing or other construction supports.

**4.2** Before undertaking any work within Railroad right-of-way, and before placing any obstruction over any track, the Contractor shall:

**4.2.1** Notify the Railroad's representative at least 72 hours in advance of the work.

**4.2.2** Receive assurance from the Railroad's representative that arrangements have been made for flagging service as may be necessary.

**4.2.3** Receive permission from the Railroad's representative to proceed with the work.

**4.2.4** Ascertain that the Department Engineer has received copies of notice to the Railroad and of the Railroad's response thereto.

## **5.0 Construction Procedures:**

### **5.1 General:**

**5.1.1** Construction work and operations by the Contractor on Railroad property shall be:

a. Subject to the inspection and approval of the Railroad or their designated Construction Engineering Representative.

b. In accord with the Railroad's written outline of specific conditions.

c. In accord with the Railroad's general rules, regulations and requirements including those relating to safety, fall protection and personal protective equipment.

d. In accord with these Special Provisions.

### **5.1.2 Submittal Requirements**

a. The contractor shall submit all construction related correspondence and submittals electronically to the Railroad Engineer.



- b. The contractor shall allow for 30 days for the Railroad's review and response.
- c. All work in the vicinity of the Railroad's property that has the potential to affect the Railroad's train operations or disturb the Railroad's Property must be submitted and approved by the Railroad prior to work being performed.
- d. All submittals and calculations must be signed and sealed by a registered engineer licensed in the state of the project work.
- e. All submittals shall first be approved by the Department Engineer and the Railroad Engineer, but such approval shall not relieve the Contractor from liability.
- f. For all construction projects, the following submittals, but not limited to those listed below, shall be provided for review and approval when applicable:
  - i. General Means and Methods
  - ii. Construction Excavation & Shoring
  - iii. Pipe, Culvert, & Tunnel Installations
  - iv. Demolition Procedure
  - v. Erection & Hoisting Procedure
  - vi. Debris Shielding or Containment
  - vii. Blasting
  - viii. Roadway Protection
  - ix. Formwork for the bridge deck, diaphragms, overhang brackets, and protective platforms
  - x. Bent Cap Falsework. A lift plan will be required if the contractor want to move the falsework over the tracks.
- g. For Undergrade Bridges (Bridges carrying the Railroad) the following submittals in addition to those listed above shall be provided for review and approval:
  - i. Shop Drawings
  - ii. Bearing Shop Drawings and Material Certifications
  - iii. Concrete Mix Design
  - iv. Structural Steel, Rebar, and/or Strand Certifications
  - v. 28 day Cylinder Test for Concrete Strength
  - vi. Waterproofing Material Certification
  - vii. Test Reports for Fracture Critical Members
  - viii. Foundation Construction Reports(Fabrication may not begin until the Railroad has approved the required shop drawings.)
- h. The Contractor shall include in all submissions a detailed narrative indicating the progression of work with the anticipated timeframe to complete each task. Work will not be permitted to commence until the Contractor has provided the Railroad with a satisfactory plan that the project will be undertaken without scheduling, performance or safety related issues. Submission shall also provide a listing of the anticipated equipment to be used, the location of all equipment to be used and insure a contingency plan of action is in place should a primary piece of equipment malfunction.
- i. 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.

## **5.2 Track Monitoring**

**5.2.1** At the direction of the Railroad Engineer, any activity that has the potential to disturb the Railroad track structure may require the contractor to submit a detailed track monitoring program for approval by the Railroad Engineer.

**5.2.2** The program shall specify the survey locations, the distance between the location points, and frequency of monitoring before, during, and after construction. Railroad reserves the right to modify the survey locations and monitoring frequency as necessary during the project.

**5.2.3** The survey data shall be collected in accordance with the approved frequency and immediately furnished to the Railroad Engineer for analysis.

**5.2.4** If any movement has occurred as determined by the Railroad Engineer, the Railroad will be immediately notified. Railroad, at its sole discretion, shall have the right to immediately require all contractor operations to be ceased and determine what corrective action is required. Any corrective action required by the Railroad or performed by the Railroad including the monitoring of corrective action of the contractor will be at project expense.

## **5.3 Roadway Protection**

**5.3.1** The Contractor shall submit the proposed roadway protection system detailing the specific filter fabric and anchorage system to be used during construction activities.

**5.3.2** The roadway protection is to extend 25' beyond the proposed limit of work and be continuously maintained to prevent all contaminants from entering the ballast section of all tracks for the entire duration of the project.

## **5.4 Maintenance of Railroad Facilities:**

**5.4.1** The Contractor will be required to maintain all ditches and drainage structures free of silt or other obstructions which may result from his operations and provide and maintain any erosion control measures as required. The Contractor will promptly repair eroded areas within Railroad rights-of-way and repair any other damage to the property of the Railroad or its tenants.

**5.4.2** If, in the course of construction, it may be necessary to block a ditch, pipe or other drainage facility, temporary pipes, ditches or other drainage facilities shall be installed to maintain adequate drainage, as approved by NS. Upon completion of the work, the temporary facilities shall be removed and the permanent facilities restored.

**5.4.3** All such maintenance and repair of damages due to the Contractor's operations shall be done at the Contractor's expense.

## **5.5 Storage of Materials and Equipment:**

**5.5.1** Materials and equipment shall not be stored where they will interfere with Railroad operations, nor on the rights-of-way of the Railroad Company without first having obtained permission from the Railroad Engineer, and such permission will be with the understanding that the Railroad Company will not be liable for damage to such material and equipment from any cause and that the Railroad Engineer may move or require the Contractor to move, at the Contractor's expense, such material and equipment.

**5.5.2** All grading or construction machinery that is left parked near the track unattended by a watchman shall be effectively immobilized so that it cannot be moved by unauthorized persons. The Contractor shall protect, defend, indemnify and save Railroad, and any associated, controlled or affiliated corporation, harmless from and against all losses, costs, expenses, claim or liability for loss or damage to property or the loss of life or personal injury, arising out of or incident to the Contractor's failure to immobilize grading or construction machinery.

## **5.6 Cleanup:**

**5.6.1** Upon completion of the work, the Contractor shall remove from within the limits of the Railroad rights-of-way, all machinery, equipment, surplus materials, falsework, rubbish or temporary buildings of the Contractor, and leave said rights-of-way in a neat condition satisfactory to the Chief Engineer of the Railroad or his authorized representative.

## **6.0 Damages:**

**6.1** The Contractor shall assume all liability for any and all damages to his work, employees, servants, equipment and materials caused by Railroad traffic.

**6.2** Any cost incurred by the Railroad for repairing damages to its property or to property of its tenants, caused by or resulting from the operations of the Contractor, shall be paid directly to the Railroad by the Contractor.

## **7.0 Flagging Services:**

### **7.1 Requirements:**

**7.1.1** If required for the project, Flagging services will not be provided until the contractor's insurance has been reviewed & approved by the Railroad.

**7.1.2** Under the terms of the agreement between the Department and the Railroad, the Railroad has sole authority to determine the need for flagging required to protect its 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, 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.

**7.1.3** Normally, the Railroad will assign one flagman to a project; but in some cases, more than one may be necessary, such as yard limits where three (3) flagmen may be required. However, if the Contractor works within distances that violate instructions given by the Railroad's authorized representative or performs work that has not been scheduled with the Railroad's authorized representative, a flagman or flagmen may be required full time until the project has been completed.

**7.1.4** For projects exceeding 30 days of construction, the Contractor shall provide the flagmen a small work area with a desk/counter and chair within the field/site trailer, including the use of bathroom facilities, where the flagman can check in/out with the Project, as well as to the flagman's home terminal. The work area should provide access to two (2) electrical outlets for recharging radio(s), and a laptop computer; and have the ability to print off needed documentation and orders as needed at the field/site trailer. This should aid in maximizing the flagman's time and efficiency on the Project.

## **7.2 Scheduling and Notification:**

**7.2.1** The Contractor's work requiring railroad flagging should be scheduled to limit the presence of a flagman at the site to a maximum of 50 hours per week. The Contractor shall receive Railroad approval of work schedules requiring a flagman's presence in excess of 40 hours per week.

**7.2.2** Not later than the time that approval is initially requested to begin work on Railroad right-of-way, Contractor shall furnish to the Railroad and the Department a schedule for all work required to complete the portion of the project within Railroad right-of-way and arrange for a job site meeting between the Contractor, the Department, and the Railroad's authorized representative. Flagman or Flagmen may not be provided until the job site meeting has been conducted and the Contractor's work scheduled.

**7.2.3** The Contractor will be required to give the Railroad representative at least 10 working days of advance written notice of intent to begin work within Railroad right-of-way in accordance with this special provision. Once begun, when such work is then suspended at any time, or for any reason, the Contractor will be required to give the Railroad representative at least 3 working days of advance notice before resuming work on Railroad right-of-way. Such notices shall include sufficient details of the proposed work to enable the Railroad representative 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, it shall be confirmed in writing with copy to the Engineer. If flagging is required, no work shall be undertaken until the flagman, or flagmen are present at the job site. It may take up to 30 days to obtain flagging initially from the Railroad. When flagging begins, the flagman 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, it may take up to 30 days to again obtain from the Railroad. Due to Railroad labor agreements, it is necessary to give 5 working days notice before flagging service may be discontinued and responsibility for payment stopped.

**7.2.4** If, after the flagman is assigned to the project site, an emergency arises that requires the flagman's presence elsewhere, then the Contractor shall delay work on Railroad right-of-way until such time as the flagman is again available. Any additional costs resulting from such delay shall be borne by the Contractor and not the Department or Railroad.

## **7.3 Payment:**

**7.3.1** The Department will be responsible for paying the Railroad directly for any and all costs of flagging which may be required to accomplish the construction. These costs will be deducted from the contractor's payments.

**7.3.2** The estimated cost of flagging is current rate per day based on a 10-hour work day (approximately \$1,000 per day). This cost includes the base pay for the flagman, overhead, and includes a per diem charge for travel expenses, meals and lodging. The charge to the Department 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.

**7.3.3** Work by a flagman 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 and 1/2 times the appropriate rate. Work by a flagman in excess of 12 hours per day will result in overtime at 2 times the appropriate rate. If work is performed on a holiday, the flagging rate is 2 and 1/2 times the normal rate.

**7.3.4** Railroad work involved in preparing and handling bills will also be charged to the Department. Charges to the Department by the Railroad shall be in accordance with applicable provisions of Subchapter B, Part 140, Subpart I and Subchapter G, Part 646, Subpart B of the Federal-Aid Policy Guide issued by the Federal Highway Administration on December 9, 1991, including all current amendments. Flagging costs are subject to change. The above estimates of flagging costs are provided for information only and are not binding in any way.

#### **7.4 Verification:**

**7.4.1** Railroad's flagman will electronically enter flagging time via Railroad's electronic billing system. Any complaints concerning flagging must be resolved in a timely manner. If the need for flagging is questioned, please contact Railroad's System Engineer - Public Improvements. All verbal complaints will be confirmed in writing by the Contractor within 5 working days with a copy to the Department's Engineer. Address all written correspondence electronically to Railroad's System Engineer - Public Improvements:

**7.4.2** The Railroad flagman assigned to the project will be responsible for notifying the Department 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 he performs such services for each separate period that services are provided. The Department Engineer will document such notification in the project records. When requested, the Department Engineer will also sign the flagman's diary showing daily time spent and activity at the project site.

#### **8.0 Haul Across Railroad:**

**8.1** Where the plans show or imply that materials of any nature must be hauled across a Railroad, unless the plans clearly show that the Department has included arrangements for such haul in its agreement with the Railroad, the Contractor will be required to make all necessary arrangements with the Railroad regarding means of transporting such materials across the Railroad. The Contractor or Agency will be required to bear all costs incidental to such crossings whether services are performed by his own forces or by Railroad personnel.

**8.2** No crossing may be established for use of the Contractor for transporting materials or equipment across the tracks of the Railroad Company unless specific authority for its installation, maintenance, necessary watching and flagging thereof and removal, until a temporary private crossing agreement has been executed between the Contractor and Railroad. The approval process for an agreement normally takes 90-days.

#### **9.0 Work for the Benefit of the Contractor:**

**9.1** All temporary or permanent changes in wire lines or other facilities which are considered necessary to the project are shown on the plans; included in the force account agreement between the Department and the Railroad or will be covered by appropriate revisions to same which will be initiated and approved by the Department and/or the Railroad.

**9.2** Should the Contractor desire any changes in addition to the above, then he shall make separate arrangements with the Railroad for same to be accomplished at the Contractor's expense.

#### **10.0 Cooperation and Delays:**

**10.1** It shall be the Contractor's responsibility to arrange a schedule with the Railroad for accomplishing stage construction involving work by the Railroad or tenants of the Railroad. In arranging his schedule he shall ascertain, from the Railroad, the lead time required for assembling crews and materials and shall make due allowance therefore.

**10.2** No charge or claim of the Contractor against either the Department or the Railroad Company will be allowed for hindrance or delay on account of railway traffic; any work done by the Railway Company or other delay incident to or necessary for safe maintenance of railway traffic or for any delays due to compliance with these special provisions.

#### **11.0 Trainman's Walkways:**

**11.1** 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, extending to a line not less than 10 feet from centerline of track, shall be maintained. Any temporary impediments to walkways and track drainage encroachments or obstructions allowed during work hours while Railway's protective service is provided shall be removed before the close of each work day. If there is any excavation near the walkway, a handrail, with 10'-0" minimum clearance from centerline of track, shall be placed and must conform to AREMA and/or FRA standards.

#### **12.0 Guidelines for Personnel on Railroad Right-Of-Way:**

**12.1** The Contractor and/or the Agency's personnel authorized to perform work on Norfolk Southern's property as specified in Section 2 above are not required to complete Norfolk Southern Roadway Worker Protection Training; However the Contractor and the Agency's personnel must be familiar with Norfolk Southern's standard operating rules and guidelines, should conduct themselves accordingly, and may be removed from the property for failure to follow these guidelines.

**12.2** All persons shall wear hard hats. Appropriate eye and hearing protection must be used. Working in shorts is prohibited. Shirts must cover shoulders, back and abdomen. Working in tennis or jogging shoes, sandals, boots with high heels, cowboy and other slip-on type boots is prohibited. Hard-sole, lace-up footwear, zippered boots or boots cinched up with straps which fit snugly about the ankle are adequate. Wearing of safety boots is strongly recommended. In the vicinity of at-grade crossings, it is strongly recommended that reflective vests be worn.

**12.3** No one is allowed within 25' of the centerline of track without specific authorization from the flagman.

**12.4** All persons working near track while train is passing are to lookout for dragging bands, chains and protruding or shifted cargo.

**12.5** No one is allowed to cross tracks without specific authorization from the flagman.

**12.6** All welders and cutting torches working within 25' of track must stop when train is passing.

**12.7** No steel tape or chain will be allowed to cross or touch rails without permission from the Railroad.

**13.0 Guidelines for Equipment on Railroad Right-Of-Way:**

**13.1** No crane or boom equipment will be allowed to set up to work or park within boom distance plus 15' of centerline of track without specific permission from railroad official and flagman.

**13.2** No crane or boom equipment will be allowed to foul track or lift a load over the track without flag protection and track time.

**13.3** All employees will stay with their machines when crane or boom equipment is pointed toward track.

**13.4** All cranes and boom equipment under load will stop work while train is passing (including pile driving).

**13.5** Swinging loads must be secured to prevent movement while train is passing.

**13.6** No loads will be suspended above a moving train.

**13.7** No equipment will be allowed within 25' of centerline of track without specific authorization of the flagman.

**13.8** Trucks, tractors or any equipment will not touch ballast line without specific permission from railroad official and flagman. Orange construction fencing may be required as directed.

**13.9** No equipment or load movement within 25' or above a standing train or railroad equipment without specific authorization of the flagman.

**13.10** All operating equipment within 25' of track must halt operations when a train is passing. All other operating equipment may be halted by the flagman if the flagman views the operation to be dangerous to the passing train.

**13.11** All equipment, loads and cables are prohibited from touching rails.

**13.12** While clearing and grubbing, no vegetation will be removed from railroad embankment with heavy equipment without specific permission from the Railroad Engineer and flagman.

**13.13** No equipment or materials will be parked or stored on Railroad's property unless specific authorization is granted from the Railroad Engineer.

**13.14** All unattended equipment that is left parked on Railroad property shall be effectively immobilized so that it cannot be moved by unauthorized persons.

**13.15** All cranes and boom equipment will be turned away from track after each work day or whenever unattended by an operator.

**13.16** Prior to performing any crane operations, the contractor shall establish a single point of contact for the Railroad flagman to remain in communication with at all times. Person must also be in direct contact with the individual(s) directing the crane operation(s).

**14.0 Insurance:** The amount of work to be performed upon, over or under Railroad's right of way is estimated to be 1 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, the Prime Contractor will be required to carry insurance of the following kinds and amounts:

**14.1.1** Commercial General Liability Insurance having a combined single limit of not less than \$2,000,000 per occurrence for all loss, damage, cost and expense, including attorneys' fees, arising out of bodily injury liability and property damage liability during the policy period. Said policy shall include explosion, collapse, and underground hazard (XCU) coverage, shall be endorsed to name Railroad specified in item 14.1.4.c. below both as the certificate holder and as an additional insured, and shall include a severability of interests provision.

**14.1.2** Automobile Liability Insurance with a combined single limit of not less than \$1,000,000 each occurrence for injury to or death of persons and damage to or loss or destruction of property. Said policy or policies shall be endorsed to name Railroad specified in item 14.1.4.c below both as the certificate holder and as an additional insured and shall include a severability of interests provision.

**14.1.3** Railroad Protective Liability Insurance having a combined single limit of not less than \$5,000,000 each occurrence and \$10,000,000 in the aggregate applying separately to each annual period. If the project involves track over which passenger trains operate, the insurance limits required are not less than a combined single limit of \$5,000,000 each occurrence and \$10,000,000 in the aggregate applying separately to each annual period. Said policy shall provide coverage for all loss, damage or expense arising from bodily injury and property damage liability, and physical damage to property attributed to acts or omissions at the job site.

**14.1.4** The standards for the Railroad Protective Liability Insurance are as follows:

a. The insurer must be rated A- or better by A.M. Best Company, Inc.

Note: NS does not accept from insurers Chartis (AIG or Affiliate Company including Lexington Insurance Company), Hudson Group or Liberty or Affiliated Company.

b. The policy must be written using one of the following combinations of Insurance Services Office ("ISO") Railroad Protective Liability Insurance Form Numbers:

- i. CG 00 35 01 96 and CG 28 31 10 93; or
- ii. CG 00 35 07 98 and CG 28 31 07 98; or
- iii. CG 00 35 10 01; or
- iv. CG 00 35 12 04; or
- v. CG 00 35 12 07; or
- vi. CG 00 35 04 13.



c. The named insured shall read:

Norfolk Southern Corporation and Its Subsidiaries  
Three Commercial Place  
Norfolk, Virginia 23510-2191  
Attn: Risk Management

d. The description of operations must appear on the Declarations, must match the project description in this agreement, and must include the appropriate Department project and contract identification numbers.

e. The job location must appear on the Declarations and must include the city, state, and appropriate highway name/number. NOTE: Do not include any references to milepost on the insurance policy.

f. The name and address of the prime contractor must appear on the Declarations.

g. The name and address of the Department must be identified on the Declarations as the "Involved Governmental Authority or Other Contracting Party."

h. Endorsements/forms that are required are:

- i. Physical Damage to Property Amendment
- ii. Terrorism Risk Insurance Act (TRIA) coverage must be included

i. Other endorsements/forms that will be accepted are:

- i. Broad Form Nuclear Exclusion – Form IL 00 21
- ii. 30-day Advance Notice of Non-renewal or cancellation
- iii. Required State Cancellation Endorsement
- iv. Quick Reference or Index Form CL/IL 240

j. Endorsements/forms that are NOT acceptable are:

- i. Any Pollution Exclusion Endorsement except CG 28 31
- ii. Any Punitive or Exemplary Damages Exclusion
- iii. Known injury or Damage Exclusion form CG 00 59
- iv. Any Common Policy Conditions form
- v. Any other endorsement/form not specifically authorized in item no. i above.
- vi. An endorsement that limits or excludes Professional Liability coverage
- vii. A Non-Cumulation of Liability or Pyramiding of Limits Endorsements
- viii. An Endorsement that excludes TRIA coverage
- ix. A sole Agent Endorsement
- x. Any type of deductible endorsement or amendment

**14.2** If any part of the work is sublet, similar insurance, and evidence thereof as specified in 14.1 above, shall be provided by or on behalf of the subcontractor to cover its operations on Railroad's right of way.

**14.3** Prior to entry on Railroad right-of-way, the original Railroad Protective Liability Insurance Policy shall be submitted by the Prime Contractor to the Department at the address below for its review and transmittal to the Railroad. In addition, certificates of insurance evidencing the Prime Contractor's and any subcontractors' Commercial General Liability Insurance shall be issued to the Railroad and the Department at the addresses below and forwarded to the Department for its review and transmittal to the Railroad. The certificates of insurance shall state that the insurance coverage will not be suspended, voided, canceled, or reduced in coverage or limits without (30) days advance written notice to Railroad and the Department. No work will be permitted by Railroad on its right-of-way until it has reviewed and approved the evidence of insurance required herein.

Railroad  
Risk Management  
Norfolk Southern Railway Company  
Three Commercial Place  
Norfolk, VA 23510-2191  
[NSRISK3@NSCORP.COM](mailto:NSRISK3@NSCORP.COM)

Commission  
Mr. Dave Ahlvers  
State Construction and Materials Engineer  
MoDOT  
P.O. Box 270  
Jefferson City, MO 65102

**14.4** The insurance required herein shall in no way serve to limit the liability of Department or its Contractors under the terms of this agreement.

#### **14.5 Insurance Submission Procedures**

**14.5.1** Norfolk Southern will only accept initial insurance submissions via email to [NSRISK3@NSCORP.COM](mailto:NSRISK3@NSCORP.COM). Norfolk Southern will NOT accept initial insurance submissions via hard copies that would be send either US Mail or Overnight carrier or faxes as only electronic versions are to be submitted to Railroad. Please provide point of contact information with the submission including a phone number and email address.

**14.5.2** Norfolk Southern requires the following two (2) forms of insurance in the initial electronic insurance submission to [NSRISK3@NSCORP.COM](mailto:NSRISK3@NSCORP.COM) be submitted under a cover letter providing details of the project and containing the contact information:

a. The full original or certified true electronic countersigned copy of the railroad protective liability insurance policy in its entirety inclusive of all declarations, schedule of forms and endorsements along with the policy forms and endorsements.

b. The contractor's commercial general, automobile, and workers' compensation liability insurance certificate of liability insurance evidencing a combined single limit of a minimum of \$2M per occurrence of general and \$1M per occurrence of automobile liability insurance naming Norfolk Southern Corporation and its subsidiaries, Three Commercial Place, Norfolk, VA 23510 as the certificate holder and as an additional insured on both the general and automobile liability insurance policy.

**14.5.3** Norfolk Southern does not accept notation of Railroad Protective insurance on a certificate of liability insurance form or Binders as Norfolk Southern must have the full original or certified true electronic countersigned policy. Norfolk Southern understands that this can typically take a minimum of 30-45 days to receive for review. Please also note that mere receipt is not the only issue but review for compliance, which Norfolk Southern has 10 business days from receipt to respond.

## **15.0 Failure to Comply:**

**15.1** In the event the Contractor violates or fails to comply with any of the requirements of these Special Provisions:

**15.1.1** The Railroad Engineer may require that the Contractor vacate Railroad property.

**15.1.2** The Engineer may withhold all monies due the Contractor on monthly statements.

**15.2** Any such orders shall remain in effect until the Contractor has remedied the situation to the satisfaction of the Railroad Engineer and the Engineer.

## **16.0 Payment for Cost of Compliance:**

**16.1** No separate payment will be made for any extra cost incurred on account of compliance with these special provisions. All such costs shall be included in prices bid for other items of the work as specified in the payment items.

## **17.0 Project Information:**

Date: 07/27/2021

NS File No.: \_\_\_\_\_

NS Milepost: **Midwest Division DOT# 960243B at MP D-484.32 & DOT# 960245P at MP AE-4.58**

Department's Project No.: J6I3541

N. Special Provisions for Protection of Terminal Railroad Association of St. Louis Railway Interests

To Report an Emergency on property of the Terminal Railroad Association of St. Louis (hereinafter "Railroad"), call: (618) 451-8478. This project includes the washing of Stan Musial Veteran's Memorial Bridge MoDOT Project J6I3541.

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

**1.1** Railroad's authorized representative, 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 Railroad tracks. The Railroad Engineer for this Project is identified below, with current contact information:

Mr. Eric Fields  
Chief Engineer  
Terminal Railroad Association of St. Louis  
1017 Olive Street, 5<sup>th</sup> Floor  
St. Louis, Missouri 6310  
Office: (618) 451-8428

**1.2** The Commission's authorized representative, herein called "Engineer", shall have authority over all other matters as prescribed herein and in the Project specifications.

## **2.0 Contractor's Indemnity Obligations to Railroad.**

**2.1** The term "Contractor" as used in these special provisions (the "Railroad Job Special Provisions") means the Commission's contractor for the construction of the proposed work on the grade separation structure (the "Project"), and includes any and all subcontractors. The Contractor shall indemnify, defend and hold Railroad harmless from and against any and all loss, damage, claims, demands, causes of action, costs and expenses of any nature arising out of injury to or death of any person, or out of damage to or destruction of any property, including, without limitation, damage to fiber optic, communication and other cable lines and systems, where this injury, death, damage or destruction results from any cause arising out of work performed by the Contractor pursuant to the agreement between Railroad and Commission for this Project, and shall also release 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 Railroad's right of way by the Contractor. The Contractor's liability will not be affected if any damage or claim was occasioned by or contributed to by the negligence of Railroad, Railroad's agents, servants, employees or otherwise, except to the extent that any damage or claim has been proximately caused by the intentional misconduct or sole or gross negligence of Railroad, or any of Railroad's officers, employees, agents, subcontractors, successors or assigns. 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 Railroad harmless from any claims, expenses, costs, actions, demands, losses, fines, penalties, and fees, arising from, related to or connected, in whole or in part, with the removal of the Contractor's agents, servants, employees or invitees from Railroad's property for safety reasons.

**2.3** The Contractor shall also indemnify, defend and hold Railroad harmless with reference to all fines or penalties imposed or assessed by federal, state and local governmental agencies against Railroad as the proximate result of contractor's work under this contract, including these Railroad Job Special Provisions.

**3.0 Notice of Starting Work.** The Contractor shall not commence any work on Railroad's right of way until the Contractor has complied with the following conditions:

**3.1** At least thirty (30) days before beginning any work upon Railroad's right of way, the Contractor shall furnish to Railroad and Commission a schedule for all work required to complete the portion of the Project within Railroad's right of way, and shall arrange for a job site meeting between the Contractor, the Engineer, and Railroad Engineer. Railroad may withhold providing any flaggers until the Contractor has conducted the job site meeting and scheduled the Contractor's work.

**3.2** At least 30 days before the Contractor proposes to begin work on Railroad's right of way, the Contractor shall give Railroad written notice of intent to begin work on Railroad's right of way, to Railroad Engineer.

**3.3** The Contractor shall obtain written or electronic authorization from Railroad to begin work on Railroad's right of way, including an outline of specific conditions with which contractor shall comply. Railroad shall not unreasonably withhold this authorization. The contractor shall obtain

from the Railroad and complete the Terminal Railroad Association of St. Louis License for Right of Entry On or Near Operational Railroad Property.

**3.4** The Contractor shall obtain the insurance coverage required in Section 14.0 of these Railroad Job Special Provisions. Contractor shall submit written evidence of such coverage to Railroad prior to commencing any work.

**3.5 Safety Orientation:** The Contractor shall ensure that all of its employees, subcontractors or invitees enroll with e-railsafe Shortline at [www.ers-shortline.com](http://www.ers-shortline.com) and that any and all such employees, subcontractors or invitees obtain and have on their person at all times while on Railroad Property, the appropriate credentials. The Contractor shall certify that each of contractor's employees, subcontractors or invitees who will be working Railroad's right of way have received the same safety orientation through sessions conducted by the contractor or through the Internet before any work shall be done on the Railroad's right of way.

**3.6** Railroad's written authorization to proceed with the work, with a copy to the Engineer, will include the names, addresses and telephone numbers of 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 Interference with Railroad Operations.**

**4.1** The Contractor shall arrange and conduct all work so that there shall be no interference with Railroad's operations, including train, signal, telephone and telegraphic services; or damage to Railroad's property; poles, wires and other facilities of tenants, licensees, easement grantees and invitees on Railroad's right of way. Whenever work may affect the operations or safety of trains, the Contractor shall first submit the method of doing this work to Railroad Engineer for approval, but such approval shall not relieve the Contractor from liability. The Contractor shall defer any of its work that requires flagging service or inspection service until the flagging service required by Railroad is available at the job site.

**4.2** Whenever the Contractor's work within Railroad's right of way makes an impediment to Railroad's operations unavoidable, such as use of runaround tracks or necessity for reduced speed, the Contractor shall schedule and conduct these operations so that the impediment is reduced to the absolute minimum.

**4.3** Should conditions arising from, or in connection with the work require immediate and unusual provisions to protect Railroad's operations and property, the Contractor shall make such provisions. If in the judgment of Railroad Engineer, or the Engineer if Railroad Engineer is absent, such provision is insufficient, 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 Railroad or Commission.

**4.4** The Contractor shall be responsible for any damage to 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 Railroad's train delays that are caused exclusively by the Contractor. 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 Railroad's records. Railroad shall provide these records Railroad, upon request, to Commission or Commission's contractor.

## **5.0 Track Clearances.**

**5.1** 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 Railroad Engineer at least 72 hours in advance of the work.
- (b) Receive assurance from Railroad Engineer that arrangements have been made for flagging service as may be necessary.
- (c) Receive permission from Railroad Engineer to proceed with the work.
- (d) Ascertain that the Engineer has received copies of notice to Railroad and of Railroad's response.

**5.2** 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.

## **6.0 Construction Procedures.**

**6.1 General.** Construction work on Railroad's property shall be:

- (a) Subject to Railroad's inspection and review; and
- (b) In accordance with these Railroad Job Special Provisions.

**6.2 Falsework.** The Contractor shall be required to take special precaution and care to prevent any material from falling on 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 Railroad Engineer, but such approval shall not relieve the Contractor from liability. Before submission of plans to Railroad Engineer for approval, the Engineer will first review such plans.

**6.3 Storage of Materials.** 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 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.

**6.4 Cleanup.** Upon completion of the work, the Contractor shall remove from within the limits of 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 Railroad Engineer.

**7.0 Damages.** Railroad will not assume liability for any damages to the Contractor, contractor's work, employees, servants, equipment and materials caused by railroad traffic, except to the extent that any damage or claim has been proximately caused by Railroad's intentional

misconduct or sole or gross negligence. Any cost incurred by Railroad for repairing damages to Railroad's property or to property of Railroad's tenants, licensees, easement grantees and invitees caused by or resulting from the Contractor's operations shall be paid directly to Railroad by the Contractor.

## **8.0 Flagging Services.**

**8.1 When Railroad Requires Flagging.** Railroad shall have sole authority to determine when flagging is necessary to protect Railroad's operations from the Contractor's activities relating to this Project. Whenever Railroad reasonably determines that flagging is needed, Railroad shall provide all necessary flagging services in accordance with these Railroad Job Special Provisions and the Agreement between Commission and Railroad. The Contractor shall be responsible for arranging flagging services with Railroad, as required by Railroad, to accomplish the highway improvement. Railroad shall not unreasonably withhold or delay providing any flagging service that is needed pursuant to these Railroad Job Special Provisions.

**8.1.1** In general, Railroad may require flagging services whenever the Contractor's personnel or equipment are, or are likely to be, working on 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 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, 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.

**8.1.2** However, if the Contractor works upon Railroad's right of way within distances that violate instructions given by Railroad Engineer, or performs work upon Railroad's right of way that has not been scheduled with Railroad Engineer, then Railroad may reasonably require one or more flaggers to be assigned full time until the contractor has completed all its work upon Railroad's right of way relating to this Project.

## **8.2 Scheduling and Notification of Flagging.**

**8.2.1** Not less than thirty (30) days before beginning work upon Railroad's right of way pursuant to this Project, the Contractor shall give Railroad Engineer advance written notice of the Contractor's intent to begin work within Railroad's right of way in accordance with these Railroad Job Special Provisions. These notices shall include sufficient details of the proposed work to enable the Railroad Engineer to determine if the Railroad will require flagging. If the Railroad requires flagging, the Contractor shall not perform any work until the flagger or flaggers are present at the job site. Arrangements for flagging shall be confirmed no later than 5:00 p.m. the Wednesday prior to the week before flagging services are needed. If any notices required to be given by this paragraph are in writing, the Contractor shall furnish the Engineer a copy; if notice is given verbally, the Contractor shall confirm that notice in writing with copy to the Engineer. The Contractor should address notification for flagging to:

Mr. Asim S. Raza  
Chief Legal Officer, Director of Corporate Affairs  
Terminal Railroad Association of St. Louis  
1017 Olive Street, 5<sup>th</sup> Floor  
St. Louis, Missouri 63101  
Office: (314) 241-4729

After flagging begins, the flagger is assigned to work at the Project site on a continual basis until no longer needed and cannot provide flagging on a spot basis. If flagging becomes temporarily unnecessary and Railroad suspends flagging services, it may take up to 30 days after the Contractor's request to resume flagging services for this Project. Due to Railroad labor agreements, Railroad may require the Contractor to give ten (10) working days' notice before Railroad discontinues flagging services and ends the Contractor's responsibility for payment.

**8.2.2** The Railroad flagger assigned to the Project shall notify the Engineer upon arrival at the job site on the first day, or as soon thereafter as possible, that flagging services have begun, and on the last day that flagger performs such services for each separate period that Railroad provides flagging services. The Engineer will document such notification in the Project records.

**8.2.3** If, after the Railroad assigns a flagger to the Project site, emergencies arise which require the reassignment of the flagger elsewhere, then the Contractor shall delay work on Railroad's right of way until a flagger is again available. The Contractor, not Railroad, shall bear any additional costs resulting from this delay. Railroad shall resume flagging for this Project as soon as possible after the emergency has ended.

**8.2.4** The Contractor shall provide a temporary structure to provide shelter from weather conditions for the person(s) providing flagging protection service on behalf of Railroad as described herein. The structure shall be provided in an area immediately accessible to Railroad's main track and the construction site, and be equipped with telephone service, lighting and desk.

### **8.3 Process for ordering on-track protection.**

Once approval has been granted by Licensor for access to railroad property and/or operating right-of-way, a person to serve as an Employee in Charge of on-track safety (EIC) will be necessary at the work site to comply with federal regulations, railroad safety rules, and to protect track structure and signal assets.

To order EIC services please follow the instructions below:

Contact **RailPros Field Services**, Licensor's authorized EIC service provider using the contact information shown below:

RailPros Field Services, Inc.  
Email: [trrainfo@railpros.com](mailto:trrainfo@railpros.com) or call;  
Phone: (877) 315-0513 x116

Once the project information is received, RailPros will send a quote for EIC services. To accept the cost and terms of service simply sign the quote and return it to RailPros via email to [trrainfo@railpros.com](mailto:trrainfo@railpros.com). RailPros will work with your team and TRRA to schedule access to the railroad and for the EIC.

Advanced notice is greatly appreciated and will ensure greater availability to match your needs. We suggest contacting RailPros no less than ten (10) business days before your projected start date. If your start date is closer than that, please contact RailPros ASAP and they will work with you to see if they can accommodate your requested start date.



At the end of the month or the end of the project (whichever comes first), RailPros will send you an invoice directly for the services provided.

Please contact RailPros Field Services for additional information or to answer any questions.

## **9.0 Haul Across Railroads.**

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

**9.2** The Contractor shall not establish any crossing for transporting materials or equipment across the tracks of 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.

**10.0 Work for the Contractor's Benefit.** 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 Commission and Railroad, or will be covered by appropriate revisions to those documents, which shall be initiated and approved by Commission and/or Railroad. Should the Contractor desire any changes in addition to the above, then contractor shall make separate arrangements with Railroad for same to be accomplished at the Contractor's expense.

**11.0 Cooperation and Delays.** The Contractor shall cooperate with Railroad in scheduling any staged construction involving work by Railroad or its tenants, licensees, easement grantees and invitees. The Contractor shall ascertain in advance, from Railroad, the lead-time required for assembling crews and materials, and include sufficient time for that in its work scheduling. The Contractor may not assert any charge or claim against Commission or Railroad resulting from any hindrance or delay the Contractor experiences because of railway traffic relating to any construction work by Railroad, or any other delay that is reasonable or necessary to protect the safety of railway traffic, or any other delay resulting from any person's compliance with these Railroad Job Special Provisions.

**12.0 Trainman's Walkways.** The Contractor shall maintain an unobstructed continuous space suitable for trainman's use in walking along trains, which shall extend to a line not less than 12 feet from centerline of track, along the outer side of each exterior track of multiple operated track and on each side of single operated track. Before the close of each workday, the Contractor shall remove all temporary impediments to walkways and track drainage encroachments or obstructions allowed during work hours while Railway's protective service is provided. Beside any excavation near the walkway, the Contractor shall install a handrail with a 12 feet minimum horizontal clearance from centerline of track.

**13.0 Railroad Percentage of Contractor's Total Project Bid.** The amount of work to be performed upon, over or under Railroad's right of way is estimated to be one (1%) percent of the Contractor's total bid for the Project.

#### **14.0 Insurance Requirements.**

Licensee shall procure and maintain for the duration of the contract, and for 3 years thereafter, insurance as noted below, against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the Licensee, his agents, representatives, employees, or subcontractors.

**14.1 Commercial General Liability.** Insurance having a limit of not less than \$5,000,000 per Occurrence and \$10,000,000 in the Aggregate applying to each annual period for all loss or liability, including but not limited to attorneys' fees, Products and Completed Operations, Property Damage, Bodily Injury and Personal & Advertising Injury. Coverage must be purchased on Insurance Services Office Occurrence Form CG 00 01 or the equivalent. If the required minimum limits can only be met when applying an umbrella/excess liability policy, the umbrella/excess liability policy must follow form of the underlying policy and be endorsed to "drop down" to become primary in the event the primary limits are exhausted.

Commercial General Liability Policy shall include the following:

- Bodily Injury (including death) and Property Damage
- Definition of bodily injury shall include mental anguish
- Personal Injury and Advertising Injury
- Fire legal liability
- Products and Completed Operations (endorsed for 3 years after completion of work)
- "explosion, collapse, and underground hazard" ("XCU") coverage
- Include a severability of interests provision
- The definition of insured contract must not include any exclusion or other limitation for any services being done within 50 feet of Railroad's tracks (Endorsement CG 2417)
- Policies must not contain any punitive damages exclusion
- A per project aggregate limit must apply
- It is agreed that any workers' compensation exclusion does not apply to Railroad's payments related to the Federal Employers Liability ACT or a Railroad Wage Continuation Program or similar programs and any payments made are deemed not to be either payments made or obligations assumed under any workers' compensation, disability benefits, or unemployment compensation law or similar law.

**14.2 Workers Compensation Insurance** must include coverage for:

Licensee's statutory liability under the worker's compensation laws of the state(s) in which the services are to be performed.

Employers' Liability (Part B) with limits of at least \$1,000,000 each accident, \$1,000,000 by disease policy limit, \$1,000,000 by disease each employee.

**14.3 Commercial Automobile Liability** insurance must contain the following coverage and limits:

A minimum limit of \$2,000,000 per accident applying to each annual period written on Insurance Services Office Form Number CA 0001 covering Bodily Injury and Property Damage.

Any and all motor vehicles owned, non-owned, used or hired must be covered (Symbol 1) and mobile equipment must be covered to the extent it may be excluded from the general liability insurance.

All policies must be endorsed with the following:

- CA 2070 or equivalent
- MCS-90 endorsement (if applicable for contract)

**14.4 Professional Liability Insurance** with limits of not less than \$2,000,000 Per Claim and \$2,000,000 aggregate applying to each annual period, subject to a deductible or self-insured retention not to exceed \$50,000 per occurrence (unless approved in advance by TRRA) covering claims arising out of alleged or actual negligence in the rendering or failure to render professional services related to the Work under this Agreement. Coverage shall be written on a claim-made form with a retroactive date preceding the date this Agreement was executed. Licensee shall use best efforts to renew this coverage with the same terms, conditions and limits for at least three years following the termination of this Agreement. Defense costs shall be included within the limits of liability specified above.

**14.5 Licensee's Pollution Liability Insurance** of not less than \$10,000,000 Per Claim and \$10,000,000 aggregate applying to each annual period, subject to a deductible or self-insured retention not to exceed \$25,000 per occurrence (unless approved on advance by TRRA) covering bodily injury, property damage including Natural Resource Damage) environmental damage, cleanup costs and defense of third-party claims caused by pollution conditions arising out of the Work under this Agreement. Coverage may be written on an occurrence or claims- made form, but if claims-made coverage is provided, Licensee agrees to use best efforts to renew the coverage with the same terms, conditions and limits for at least three years following the termination of this Agreement. Coverage shall be provided for claims arising out of pollution conditions occurring at non-owned disposal sites and for transportation of materials, including wastes to or from a site where covered operations are conducted.

**14.6 Railroad Protective Liability** Insurance having a combined single limit of not less than \$5,000,000 each occurrence and \$10,000,000 in the aggregate applying separately to each annual period. Said policy shall provide coverage for all loss, damage or expense arising from bodily injury and property damage liability, and physical damage to property attributed to acts or omissions at the job site. The standards for the Railroad Protective Liability Insurance are as follows:

- The policy shall be written on a standard ISO form CG 0035 or equivalent.
- The named Insured shall be identified as the Railroad
- Policy shall be endorsed to include broad form coverage for property damage "Physical Damage to Property Definition Amendment"

- Sudden and Accidental Pollution

- Evacuation Expenses

**14.7 Property Insurance**, insuring Licensee's property of every kind and description and of persons claiming by or through Licensee against those risks normally encompassed in an "all-risk" policy, including, but not limited to, (1) loss or damage by fire; (2) loss or damage from such other risk or hazards now or hereafter embraced by an "extended coverage endorsement,"

(3) loss for flood if the area/property upon which Licensee is working is a designated flood or flood insurance area; and (4) such other risks as reasonably prudent owner of similar property in the locality where the work area is located would normally insure against. Such insurance shall provide for the full replacement cost in the event of a total destruction of Licensee's property.

#### **14.8 Other Requirements**

- Railroad its officers, officials, employees, and volunteers must be identified as an additional insured on all policies except workers compensation and Professional Liability and be the named insured on the railroad protective policy.

- No Punitive Damages Exclusions: All policies must not contain an exclusion for punitive damages.

- Waivers of Recovery and Subrogation: Licensee agrees to waive its right of recovery against Railroad for all claims and suits against Railroad with the exception of the Professional Liability claims. In addition, its insurers with the exception of the Professional Liability insurers, through the terms of the policy or policy endorsement, must waive their right of subrogation against Railroad for all claims and suits. The certificate of insurance must reflect the waiver of subrogation. Licensee further waives its right of recovery, and its insurers must also waive their right of subrogation against Railroad for loss of its owned or leased property or property under Licensee's care custody and control.

- Primary and Non-contributory: Licensee's insurance policies through policy endorsement must include wording which states that the policy is primary and non-contributory with respect to any insurance carried by Railroad. The certificate of insurance must reflect that the above wording is included in evidenced policies.

- Separation of insureds. All policies must contain a separation of insureds provision except workers compensation. Separation of insureds must be indicated on the certificate of insurance.

- Each insurance policy required by this clause shall provide that coverage shall not be canceled, except with notice to the Railroad.

**14.9 Acceptability of Insurers:** Insurance is to be placed with insurers with a current A.M. Best rating of no less than A: VII, unless otherwise acceptable to the Railroad.

**14.10 Self-Insurance:** Licensee 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 Licensee in lieu of insurance. Any and all Railroad liabilities that would otherwise in accordance with the provisions of the

Agreement, be covered by Licensee's insurance will be covered as if Licensee elected not to include a deductible, self-insured retention or other financial responsibility for claims.

**14.11 Independent Associates, Consultants and Subcontractors:** If any portion of the services are to be subcontracted by contractor, Licensee must require that the independent associates consultant and/or subcontractor provide and maintain the insurance coverages set forth herein, naming Railroad as an additional insured and requiring that the independent associate, consultant, and/or subcontractor release, defend and indemnify Railroad to the same extent and under the same terms and conditions as Licensee is required to release, defend and indemnify Railroad herein.

**14.12 No Limits:** The fact that insurance (including without limitation, self-insurance) is obtained by Licensee will not be deemed to release or diminish the liability of Licensee including, without limitation, liability under the indemnity provisions of the agreement. Damages recoverable by Railroad will not be limited by the amount of the required insurance.

**14.13 Verification of Coverage:** Licensee shall furnish the Railroad with original certificates and amendatory endorsements, or copies of the applicable insurance language, effecting coverage required by this contract. All certificates and endorsements are to be received and approved by the Railroad before work commences. However, failure to obtain the required documents prior to the work beginning shall not waive the Licensee's obligation to provide them. The Railroad reserves the right to require complete, certified copies of all required insurance policies, including endorsements, required by these specifications, at anytime.

**14.14** Prior to entry on Railroad's Property, the original Railroad Protective Liability Insurance Policy shall be submitted by the prime Contractor to the Railroad at the address below for review and approval by the Railroad. In addition, certificates of insurance evidencing the Contractor's and any subcontractor's Commercial General Liability Insurance shall be issued to the Railroad and the Commission at the addresses below. The certificates of insurance shall state that the insurance coverage will not be suspended, voided, canceled, or reduced in coverage or limits without 30 days advanced written notice to Railroad and the Commission. No work will be permitted on the Railroad's Property until the Railroad has reviewed and approved the evidence of insurance required herein.

Railroad

Mr. Asim S. Raza  
Chief Legal Officer, Director of  
Corporate Affairs  
Terminal Railroad Assoc. of St. Louis  
1017 Olive Street, 5<sup>th</sup> Floor  
St. Louis, MO 63101

Commission

Mr. David Ahlvers  
State Construction and Materials Engineer  
MoDOT  
P.O. Box 270  
Jefferson City, MO 65102

**15.0 Guidelines for Personnel on Railroad's Right of Way.**

**15.1** All persons shall wear hard hats. Appropriate eye and hearing protection shall be used. Working in shorts shall be prohibited. Shirts shall cover shoulders, back and abdomen. Working in tennis or jogging shoes, sandals, boots with high heels, cowboy and other slip-on type boots shall be prohibited. Hard-sole, lace-up footwear, zippered boots or boots cinched up with straps which fit snugly about the ankle shall be adequate. Safety boots are strongly recommended.

**15.2** No one shall be allowed within 25 feet of the centerline of track without specific authorization from the flagger.

**15.3** All persons working near track while train is passing shall lookout for dragging bands, chains and protruding or shifted cargo.

**15.4** No one shall be allowed to cross tracks without specific authorization from the flagger.

**15.5** All welders and cutting torches working within 25 feet of track shall stop when train is passing.

**15.6** No steel tape or chain shall be allowed to cross or touch rails without permission.

**16.0 Guidelines for Equipment on Railroad's Right of Way.**

**16.1** No crane or boom equipment shall be allowed to set up to work or park within boom distance plus 15 feet of centerline of track without specific permission from the Railroad Engineer and flagger.

**16.2** No crane or boom equipment shall be allowed to foul track or lift a load over the track without flag protection and track time.

**16.3** All employees shall stay with their machines when crane or boom equipment is pointed toward track.

**16.4** All cranes and boom equipment under load shall stop work while train is passing, including pile driving.

**16.5** Swinging loads shall be secured to prevent movement while train is passing.

**16.6** No loads shall be suspended above a moving train.

**16.7** No equipment shall be allowed within 25 feet of centerline of track without specific authorization of the flagger.

**16.8** Trucks, tractors or any equipment shall not touch ballast line without specific permission from Railroad Engineer and flagger.

**16.9** No equipment or load movement shall be within 25 feet or above a standing train or railroad equipment without specific authorization of the flagger.

**16.10** All operating equipment within 25 feet of track shall halt operations when a train is passing. The flagger may halt all other operating equipment if the flagger views the operation to be dangerous to the passing train.

**16.11** All equipment, loads and cables shall be prohibited from touching rails.

**16.12** While clearing and grubbing, no vegetation shall be removed from railroad embankment with heavy equipment without specific permission from the Railroad Engineer and flagger.

**16.13** No equipment or materials shall be parked or stored on the Railroad's Property unless specific authorization is granted from the Railroad Engineer.

**16.14** All unattended equipment that is left parked on the Railroad's Property shall be effectively immobilized so that unauthorized persons cannot move it.

**16.15** All cranes and boom equipment shall be turned away from track after each workday or whenever unattended by an operator.

**17.0 Legal Compliance and Hazardous Materials Reporting.** Contractor shall comply with all applicable federal, state and local governmental laws and regulations—including the Resource Conservation and Recovery Act, the Clean Water Act, the Oil Pollution Act, the Hazardous Materials Transportation Act, the Comprehensive Environmental Response, Compensation and Liability Act, and other environmental, health and safety laws and regulations to the extent these requirements are applicable to the Contractor's work performed under this contract. 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 the Contractor's work, acts or omissions did not cause them to be there. If the Contractor discovers any hazardous waste, hazardous substance, petroleum or other deleterious material, including 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 Railroad of such discovery, by telephoning (618) 451-8478.

(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 the release.

**18.0 Personal Injury Reporting.** Railroad must report certain injuries as a part of compliance with Federal Railroad Administration ("FRA") reporting requirements. The Contractor immediately shall report any personal injury to any employee of the Contractor, subcontractor or contractor's invitees while on Railroad's property, by phone, mail or preferably in person, to the Railroad Engineer. The Contractor shall complete the Non-Employee Personal Injury Data Collection Form and send it by Fax to Railroad Engineer no later than the close of shift on the date of the injury.

**19.0 Failure to Comply.** If the Contractor violates or fails to comply with any of the requirements of these Railroad Job Special Provisions, the Railroad may act as authorized in paragraphs (a) and (b) of this section, until the Contractor has remedied the situation to the satisfaction of the Railroad Engineer and the Engineer.

(a) The Railroad Engineer may require the Contractor to vacate Railroad's property.

(b) The Engineer may withhold all monies due to the Contractor until the Contractor has remedied the situation to the satisfaction of the Railroad Engineer and the Engineer.

**20.0 Payment for Cost of Compliance.** Commission shall not separately pay for any extra cost the Contractor or Railroad incurs on account of compliance with these Railroad Job Special Provisions. The Contractor and Railroad shall include all such cost in the contract unit price for other items included in the contract. Railroad will not pay the Contractor for any work it performs to comply with these Railroad Job Special Provisions.

O. Supplemental Revisions JSP-18-01R

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

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

Stormwater Compliance Requirements

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

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

**1.2 Reporting of Off-Site Land Disturbance.** If the project includes any planned land disturbance on the project site, prior to the start of work, the contractor shall submit a written report to the engineer that discloses all Off-site support areas where land disturbance is planned, the total acreage of anticipated land disturbance on those sites, and the land disturbance permit number(s). Upon request by the engineer, the contractor shall submit a copy of its land disturbance permit(s) for Off-site locations. Based on the total acreage of land disturbance, both on and Off-site, the engineer shall determine if these Stormwater Compliance Requirements shall apply. The Contractor shall immediately report any changes to the planned area of Off-site land disturbance. The Contractor is responsible for obtaining its own separate land disturbance permit for Off-site areas.



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

**2.1 Duties of the WPCM:**

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

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

**3.1 Hold Point.** Following the pre-activity meeting for grading/land disturbance and subsequent installation of the initial BMPs identified at the pre-activity meeting, a Hold Point shall occur prior to the start of any land disturbance operations to allow the engineer and WPCM the time needed to perform an on-site review of the installation of the BMPs to ensure compliance with the SWPPP is met. Land disturbance operations shall not begin until authorization is given by the engineer.

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

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

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

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

## COVID-19 Safety

**1.0 Description.** The coronavirus disease 2019 or COVID-19 has reached a pandemic stage across the United States, including the State of Missouri. To reduce the impact of COVID-19 outbreak conditions on businesses, workers, customers and the public, the contractor shall be aware of all COVID-19 guidance from the Center for Disease Control (CDC) and other government health mandates. The contractor shall conduct all operations in conformance with these safety directives. The guidance may change during the project construction and the contractor shall change and adapt their operation and safety protocols accordingly.

**2.0 Safety Plan.** The contractor shall include these procedures in the project safety plan as called for in the contract documents and revise the safety plan as needed.

**3.0 Essential Work.** In accordance with any state or local Stay at Home Order, care for the infrastructure has been deemed essential and MoDOT is moving forward with construction projects, this project is considered essential and the contractor and their employees, subcontractors and suppliers are considered essential business and performing essential functions.

**4.0 Basis of Payment.** Compliance with regulations and laws pertaining to COVID-19 is covered under Sec 107 of the Missouri Standard Specifications for Highway Construction. No direct payment will be made for compliance with this provision.

Job No.: J6I3541  
Route: I-70 & MO 364  
County: Various

#### 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.