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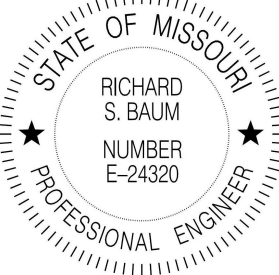
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Job No.: J6S3669

Route: US 67

County: St. Louis

|   |  |
|---|--|
|  <p>12/11/2024 9:26:28 PM<br/>Richard S. Baum<br/>MO PE E-24320</p> | <p><b>MISSOURI HIGHWAYS AND<br/>TRANSPORTATION COMMISSION</b><br/>105 W. CAPITOL AVE.<br/>JEFFERSON CITY, MO 65102<br/>Phone 1-888-275-6636</p>                              |
|   | <p><b>Jacobs Engineering Group</b><br/>1001 Highlands Plaza, Suite 400<br/>St. Louis, MO 63110<br/>Certificate of Authority: #00704<br/>Consultant Phone: (314) 335-4000</p> |
|   | <p>If a seal is present on this sheet, JSP's<br/>have been electronically sealed and<br/>dated.</p>  |
|   | <p>JOB NUMBER: J6S3669<br/>ST. LOUIS COUNTY, MO<br/>DATE PREPARED:</p>   |
|   | <p>ADDENDUM DATE:<br/><b>R002 241211</b></p>   |
| <p>Only the following items of the Job Special Provisions (Roadway) are<br/>authenticated by this seal: All</p>                                       |  |

JOB  
SPECIAL PROVISION

A. General - Federal JSP-09-02K

**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 2024 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- 13-01D

**1.0 Description.** Liquidated Damages for failure or delay in completing the work on time for this contract shall be in accordance with Sec 108.8. The liquidated damages include separate amounts for road user costs and contract administrative costs incurred by the Commission.

**2.0 Period of Performance.** Prosecution of work is expected to begin on the date specified below in accordance with Sec 108.2. Regardless of when the work is begun on this contract, all work on all projects 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.

Notice to Proceed: February 7, 2025  
Contract Completion Date: February 21, 2026

**2.1 Calendar Days and Completion Dates.** Completion of the project is required as specified herein. The count of calendar days will begin on the date the contractor starts any construction operations on the project.

|                           |                             |                                       |
|---------------------------|-----------------------------|---------------------------------------|
| Project<br><b>J6S3669</b> | Calendar Days<br><b>N/A</b> | Daily Road User Cost<br><b>\$7600</b> |
|---------------------------|-----------------------------|---------------------------------------|

**3.0 Liquidated Damages for Contract Administrative Costs.** Should the contractor fail to complete the work on or before the contract completion date specified in Section 2.0, or within the number of calendar days specified in Section 2.1, whichever occurs first, the contractor will be charged contract administrative liquidated damages in accordance with Sec 108.8 in the amount of **\$2000** 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 specified contract completion date or calendar days.

**4.0 Liquidated Damages for Road User Costs.** Should the contractor fail to complete the work on or before the contract completion date specified in Section 2.0, or within the number of calendar days specified in Section 2.1, whichever occurs first, the contractor will be charged road user costs in accordance with Sec 108.8 in the amount specified in Section 2.1 for each calendar day, or partial day thereof, that the work is not fully completed. These damages are in addition to the contract administrative damages and any other damages as specified elsewhere in this contract.

C. Liquidated Damages / Liquidated Savings Specified (Bridge A4514) JSP-03-05B

**1.0 Description.** If construction of Bridge A4514 is not completed within **90** Calendar Days, the Commission, the traveling public, and state and local police and governmental authorities will be damaged in various ways, including but not limited to potential liability, traffic and traffic flow regulation cost, traffic congestion and motorist delay, with its resulting cost to the traveling public.

**2.0 Liquidated Damages Specified for Failure To Complete Work on Time.** These costs are not reasonably capable of being computed or quantified. Therefore, the contractor will be charged with liquidated damages specified in the amount of **\$7,600** per day for each day, or partial day thereof, that the contractor has not completed all required bridge and roadway items, has not opened all lanes to traffic, and has not removed all equipment and traffic control items from the project site, in excess of the limitation as specified elsewhere in the special provision. It will be the responsibility of the engineer to determine the quantity of excess closure time.

**2.1** The said liquidated damages specified will be assessed in addition to any other liquidated damages charged under the Missouri Standard Specifications for Highway Construction, as indicated elsewhere in this contract.

**2.2** This deduction will continue until such time as the necessary work is completed and traffic is restored.

**3.0 Liquidated Savings Specified for Early Completion.** The contractor may receive an incentive payment from the Commission, in addition to all other sums earned under the contract, if the contractor completes the project earlier than the specified calendar days specified in Section 1.0. To qualify for this incentive payment, the contractor must complete all required bridge and roadway items, all lanes must be open to traffic, and the contractor must have removed all equipment and traffic control items from the project site. An incentive payment of **\$10,000** will be paid per day for each full day that the work described above is completed prior to the specified calendar days above. The maximum amount paid as liquidated savings will not exceed **\$100,000** related to time saving specific to Bridge A4514.

**3.1** In the event of an excusable delay, including differing site conditions, an extension of the contract completion time will not extend the time specified for determining any liquidated savings or incentive, except that, in its discretion, the Commission may extend the time specified should the delay be directly caused by the Commission. Further, in the event of an excusable delay, if the contractor completes the work providing for liquidated savings or incentive on or before the milestone or other date, that shall not constitute a basis to claim acceleration costs in addition to the liquidated savings or incentive that may be earned.

**3.2** The incentive payment described above is made, not as a bonus or gift, but as stipulated compensation in full for reduced risks, delay and inconvenience experienced by the traveling public, and for other reduced costs to the Commission and public resulting from early completion.

D. Liquidated Damages / Liquidated Savings Specified (Bridge A1072) JSP-03-05B

**1.0 Description.** If construction of Bridge A1072 is not completed within **150** Calendar Days, the Commission, the traveling public, and state and local police and governmental authorities will be damaged in various ways, including but not limited to potential liability, traffic and traffic flow regulation cost, traffic congestion and motorist delay, with its resulting cost to the traveling public.

**2.0 Liquidated Damages Specified for Failure To Complete Work on Time.** These costs are not reasonably capable of being computed or quantified. Therefore, the contractor will be charged with liquidated damages specified in the amount of **\$7,600** per day for each day, or partial day thereof, that the contractor has not completed all required bridge and roadway items (including painting), has not opened all lanes to traffic, and has not removed all equipment and traffic control items from the project site, in excess of the limitation as specified elsewhere in the special provision. It will be the responsibility of the engineer to determine the quantity of excess closure time.

**2.1** The said liquidated damages specified will be assessed in addition to any other liquidated damages charged under the Missouri Standard Specifications for Highway Construction, as indicated elsewhere in this contract.

**2.2** This deduction will continue until such time as the necessary work is completed and traffic is restored.

**3.0 Liquidated Savings Specified for Early Completion.** The contractor may receive an incentive payment from the Commission, in addition to all other sums earned under the contract, if the contractor completes the project earlier than the specified calendar days specified in Section 1.0. To qualify for this incentive payment, the contractor must complete all required bridge and

roadway items (including painting), all lanes must be open to traffic, and the contractor must have removed all equipment and traffic control items from the project site. An incentive payment of **\$5,000** will be paid per day for each full day that the work described above is completed prior to the specified calendar days above. The maximum amount paid as liquidated savings will not exceed **\$75,000** related to time saving specific to Bridge A1072.

**3.1** In the event of an excusable delay, including differing site conditions, an extension of the contract completion time will not extend the time specified for determining any liquidated savings or incentive, except that, in its discretion, the Commission may extend the time specified should the delay be directly caused by the Commission. Further, in the event of an excusable delay, if the contractor completes the work providing for liquidated savings or incentive on or before the milestone or other date, that shall not constitute a basis to claim acceleration costs in addition to the liquidated savings or incentive that may be earned.

**3.2** The incentive payment described above is made, not as a bonus or gift, but as stipulated compensation in full for reduced risks, delay and inconvenience experienced by the traveling public, and for other reduced costs to the Commission and public resulting from early completion.

E. Liquidated Damages / Liquidated Savings Specified (Bridge A1074) JSP-03-05B

**1.0 Description.** If construction of Bridge A1074 is not completed by **June 6, 2025**, the Commission, the traveling public, and state and local police and governmental authorities will be damaged in various ways, including but not limited to potential liability, traffic and traffic flow regulation cost, traffic congestion and motorist delay, with its resulting cost to the traveling public.

**2.0 Liquidated Damages Specified for Failure To Complete Work on Time.** These costs are not reasonably capable of being computed or quantified. Therefore, the contractor will be charged with liquidated damages specified in the amount of **\$7,600** per day for each day, or partial day thereof, that the contractor has not completed all required bridge and roadway items (including painting), has not opened all lanes to traffic, and has not removed all equipment and traffic control items from the project site, in excess of the limitation as specified elsewhere in the special provision. It will be the responsibility of the engineer to determine the quantity of excess closure time.

**2.1** The said liquidated damages specified will be assessed in addition to any other liquidated damages charged under the Missouri Standard Specifications for Highway Construction, as indicated elsewhere in this contract.

**2.2** This deduction will continue until such time as the necessary work is completed and traffic is restored.

**3.0 Liquidated Savings Specified for Early Completion.** The contractor may receive an incentive payment from the Commission, in addition to all other sums earned under the contract, if the contractor completes the project earlier than the specified completion date specified in Section 1.0. To qualify for this incentive payment, the contractor must complete all required bridge and roadway items (including painting), all lanes must be open to traffic, and the contractor must have removed all equipment and traffic control items from the project site. An incentive payment of **\$8,000** will be paid per day for each full day that the work described above is completed prior

to the specified completion date above. The maximum amount paid as liquidated savings will not exceed **\$96,000** related to time saving specific to Bridge A1074.

**3.1** In the event of an excusable delay, including differing site conditions, an extension of the contract completion time will not extend the time specified for determining any liquidated savings or incentive, except that, in its discretion, the Commission may extend the time specified should the delay be directly caused by the Commission. Further, in the event of an excusable delay, if the contractor completes the work providing for liquidated savings or incentive on or before the milestone or other date, that shall not constitute a basis to claim acceleration costs in addition to the liquidated savings or incentive that may be earned.

**3.2** The incentive payment described above is made, not as a bonus or gift, but as stipulated compensation in full for reduced risks, delay and inconvenience experienced by the traveling public, and for other reduced costs to the Commission and public resulting from early completion.

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## **F. Work Zone Traffic Management JSP-02-06N**

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

**1.1 Maintaining Work Zones and Work Zone Reviews.** The Work Zone Specialist (WZS) shall maintain work zones in accordance with Sec 616.3.3 and as further stated herein. The WZS shall coordinate and implement any changes approved by the engineer. The WZS shall ensure all traffic control devices are maintained in accordance with Sec 616, the work zone is operated within the hours specified by the engineer, and will not deviate from the specified hours without prior approval of the engineer. The WZS is responsible to manage work zone delay in accordance with these project provisions. When requested by the engineer, the WZS shall submit a weekly report that includes a review of work zone operations for the week. The report shall identify any problems encountered and corrective actions taken. Work zones are subject to unannounced inspections by the engineer and other departmental staff to corroborate the validity of the WZS's review and may require immediate corrective measures and/or additional work zone monitoring.

**1.2 Work Zone Deficiencies.** Failure to make corrections on time may result in the engineer suspending work. The suspension will be non-excusable and non-compensable regardless if road user costs are being charged for closures.

### **2.0 Traffic Management Schedule.**

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

**2.2** The traffic management schedule shall conform to the limitations specified in Sec 616 regarding lane closures, traffic shifts, road closures and other width, height and weight restrictions.

**2.3** The engineer shall be notified as soon as practical of any postponement due to weather, material or other circumstances.

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

**2.5 Traffic Congestion.** The contractor shall, upon approval of the engineer, take proactive measures to reduce traffic congestion in the work zone. The contractor shall immediately implement appropriate mitigation strategies whenever traffic congestion reaches an excess of 10 minutes to prevent congestion from escalating to 15 minute or above threshold. If disruption of the traffic flow occurs and traffic is backed up in queues of 15 minute delays or longer, then the contractor shall immediately review the construction operations which contributed directly to disruption of the traffic flow and make adjustments to the operations to prevent the queues from reoccurring. Traffic delays may be monitored by physical presence on site or by utilizing real-time travel data through the work zone that generate text and/or email notifications where available. The engineer monitoring the work zone may also notify the contractor of delays that require prompt mitigation. The contractor may work with the engineer to determine what other alternative solutions or time periods would be acceptable.

### **2.5.1 Traffic Safety.**

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

**2.5.1.2 Non-Recurring Congestion.** When traffic queues extend to within 1000 feet of the ROAD WORK AHEAD, or similar, sign on a divided highway or to within 500 feet of the ROAD WORK AHEAD, or similar, sign on an undivided highway infrequently, the contractor shall deploy a means of providing advance warning of the traffic congestion, as approved by the engineer. The warning location shall be no less than 1000 feet and no more than 0.5 mile in advance of the end of the traffic queue on divided highways and no less than 500 feet and no more than 0.5 mile in advance of the end of the traffic queue on undivided highways.

**2.6 Transportation Management Plan.** The contractor Work Zone Specialist (WZS) shall review the Transportation Management Plan (TMP), found as an electronic deliverable on MoDOT's Online Plans Room and discuss the TMP with the engineer during the preconstruction conference. Throughout the construction project, the WZS is responsible for updating any changes or modifications to the TMP and getting those changes approved by the engineer a minimum of two weeks in advance of implementation. The WZS shall participate in the post construction conference and provide recommendations on how future TMPs can be improved.

### **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  
 Labor Day  
 Thanksgiving  
 Christmas  
 New Year's Day

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

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

**3.2** The contractor shall not perform any construction operation on the roadway, roadbed or active lanes, including the hauling of material within the project limits, during restricted periods, holiday periods or other special events specified in the contract documents.

**3.3** The contractor shall be aware that traffic volume data indicates construction operations on the roadbed between the following hours will likely result in traffic queues. Based on this, the contractor's operations will be restricted accordingly unless it can be successfully demonstrated the operations can be performed without a queue in traffic. It shall be the responsibility of the engineer to determine if the above work hours may be modified. Working hours for evenings, weekends and holidays will be determined by the engineer. The contractor may ~~not~~ **only** work during the following listed hours:

U.S. 67 (Bridge A4514):  
 9:00 a.m. - 2:00 p.m. Monday through Friday

These hours are the working hours prior to set up of the crossovers. Once set up, crossovers will be ~~operation operational~~ **at all times and there will be no restrictions to work hours.** ~~Once the crossovers are in operation, the contractor may work during the following listed hours:~~

~~U.S. 67 (Bridge A4514):  
 6:00 a.m. — 9:00 p.m. Monday through Friday~~

**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

2 REVISED

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 **\$2,500 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. If a CMS with Communication Interface is required, then the CMS shall be capable of communication 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 one lane of traffic 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.

#### G. 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 (Troop C) 636-300-2800 |
|--|

Job No.: J6S3669  
Route: US 67  
County: St. Louis

|                      |                      |                      |
|----------------------|----------------------|----------------------|
| City of Hazelwood    | City of Florissant   | City of Black Jack   |
| Fire: 314-731-3434   | Fire: 314-837-4894   | Fire: 314-741-9905   |
| Police: 314-838-5000 | Police: 314-831-7000 | Police: 314-615-4297 |

**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.

H. 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.

Jason Dohrmann, Project Contact  
St. Louis District  
1590 Woodlake Drive  
Chesterfield, MO 63017

Telephone Number: 636-812-4209  
Email: [jdohrmann@hrgreen.com](mailto:jdohrmann@hrgreen.com)

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

I. Supplemental Revisions JSP-18-01EE

- 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.

- **Delete Sec 106.9 in its entirety and substitute the following:**

**106.9 Buy America Requirements.**

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

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

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

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

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

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

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

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

**106.9.4.1** Items designated as Category 1 will consist of steel girders, piling, and reinforcing steel installed on site. Category 1 items require supporting documentation prior to incorporation into

the project showing all steps of manufacturing, including coating, as being completed in the United States and in accordance with CFR Title 23 Section 635.410 Buy America Requirements. This includes the Mill Test Report from the original producing steel mill and certifications documenting the manufacturing process for all subsequent fabrication, including coatings. The certification shall include language that certifies the following. That all steel and iron materials permanently incorporated in this project was procured and processed domestically and all manufacturing processes, including coating, as being completed in the United States and in accordance with CFR Title 23 Section 635.410.

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

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

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

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

- (a) Non-ferrous metals
- (b) Plastic and Polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables)
- (c) Glass (including optic glass)

- (d) Fiber optic cable (including drop cable)
- (e) Optical fiber
- (f) Lumber
- (g) Engineered wood
- (h) Drywall

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

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

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

Manufactured products means:

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

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

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

- Pavement Marking Paint Requirements for Standard Waterborne and Temporary

**1.0 Description.** High Build acrylic waterborne pavement marking paint shall be used in lieu of standard acrylic waterborne pavement marking paint for all Standard Waterborne Pavement Marking Paint items and all Temporary Pavement Marking Paint items. Paint thickness, bead type, bead application rate, retroreflectivity requirements, and all other specifications shall remain as stated in the Missouri Standard Specifications for Highway Construction, except as otherwise amended in the contract documents.

**2.0 Material Requirements.** Material requirements for Sec 620.20.2.5 Standard Waterborne Paint, and Sec 620.10.2 Temporary Pavement Marking Paint shall be per Sec 1048.20.1.2 High Build Acrylic Waterborne Pavement Marking Paint.



- **Delete paragraph 15.0 of the General Provision Disadvantaged Business Enterprise (DBE) Program Requirements and substitute the following:**

**15.0 Data Collection from Bidders for DBE and Non-DBE Subcontractors, Suppliers, Manufacturers and/or Brokering used and not used in bids during the reporting period.** MoDOT is a recipient of federal funds and is required by 49 CFR 26.11, to provide data about its DBE program. The information shall consist of all subcontractor quoting received for actual use and of consideration by the prime bidder. MoDOT will be requesting this information from bidding prime contractors and will provide prime bidders a form to submit the data by the last day of each month for the current letting. The information shall only include the names of both DBE and non-DBE companies that the prime bidders received quotes. MoDOT will then contact the DBEs and non-DBE subcontractors and request additional information from DBE and non-DBE subcontractors including current year of gross receipts and number of years in business. The information provided by the prime bidders shall not include any bid quote pricing regardless if it was used or not. This information will aid MoDOT in the determination of the availability of DBEs and will be used in subsequent availability studies.

- Third-Party Test Waiver for Concrete Aggregate

**1.0 Description.** Third party tests may be allowed for determining the durability factor for concrete pavement and concrete masonry aggregate.

**2.0 Material.** All aggregate for concrete shall be in accordance with Sec 1005.

**2.1** MoDOT personnel shall be present at the time of sampling at the quarry. The aggregate sample shall be placed in an approved tamper-evident container (provided by the quarry) for shipment to the third-party testing facility.

**2.2** AASHTO T 161 Method B Resistance of Concrete to Rapid Freezing and Thawing, shall be used to determine the aggregate durability factor. All concrete beams for testing shall be 3-inch wide by 4-inch deep by 16-inch long or 3.5-inch wide by 4.5-inch deep by 16-inch long. All beams for testing shall receive a 35-day wet cure fully immersed in saturated lime water prior to initiating the testing process.

**2.3** Concrete test beams shall be made using a MoDOT approved concrete pavement mix design.

**3.0 Testing Facility Requirements.** All third-party test facilities shall meet the requirements outlined in this provision.

**3.1** The testing facility shall be AASHTO accredited.

**3.1.1** For tests ran after January 1, 2025, accreditation documentation shall be on file with the Construction and Materials Division prior to any tests being performed.

**3.1.2** Construction and Materials Division may consider tests completed prior to January 1, 2025, to be acceptable if all sections of this provision are met, with the exception of 3.1.1. Accreditation documentation shall be provided with the test results for tests completed prior to January 1, 2025. No tests completed prior to September 1, 2024, will be accepted.

**3.2** The testing facility shall provide their testing process, list of equipment, equipment calibration documentation, and testing certifications or qualifications of technicians performing the AASHTO T 161 Procedure B tests. The testing facility shall provide details on their freezing and thawing apparatus including the time and temperature profile of their freeze-thaw chamber. The profile shall include the temperature set points throughout the entirety of the freeze-thaw cycle. The profile shall show the cycle time at which the apparatus drains/fills with water and the cycle time at which the apparatus begins cooling the specimens.

**3.3** Results, no more than five years old, from the third-party test facility shall compare within  $\pm 2.0$  percent of an independent test from another AASHTO accredited test facility or with MoDOT test records, in order to be approved for use (e.g. test facility results in a durability factor of 79, MoDOT's recent durability test factor is 81; this compared within +2 percent). The independent testing facility shall be in accordance with this provision. The comparison test can be from a different sample of the same ledge combination.

**3.4** When there is a dispute between the third party durability test results and MoDOT durability test results, the MoDOT durability test result shall govern.

**3.5** Test results shall be submitted to MoDOT's Construction and Materials division electronically for final approval. Test results shall include raw data for all measurements of relative modulus of elasticity and percent length change for each individual concrete specimen. Raw data shall include initial measurements made at zero cycles and every subsequent measurement of concrete specimens. Raw data shall include the cycle count and date each measurement was taken. Test results shall also include properties of the concrete mixture as required by AASHTO T 161. This shall include the gradation of the coarse aggregate sample. If AASHTO T 152 is used to measure fresh air content, then the aggregate correction factor for the mix determined in accordance with AASHTO T 152 shall also be included.

**4.0 Method of Measurement.** There is no method of measurement for this provision. The testing requirements and number of specimens shall be in accordance with AASHTO T 161 Procedure B.

**5.0 Basis of Payment.** No direct payment will be made to the contractor or quarry to recover the cost of aggregate samples, sample shipments, testing equipment, labor to prepare samples or test samples, or developing the durability report.

J. Contractor Quality Control NJSP-15-42

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

**2.0 Quality Control Plan.**

- (a) The name and contact information of the person in responsible charge of the QC testing.
- (b) A list of the QC technicians who will perform testing on the project, including the fields in which they are certified to perform testing.

- (c) A proposed independent third party testing firm for dispute resolution, including all contact information.
- (d) A list of Hold Points, when specified by the engineer.
- (e) The MoDOT Standard Inspection and Testing Plan (ITP). This shall be the version that is posted at the time of bid on the MoDOT website ([www.modot.org/quality](http://www.modot.org/quality)).

**3.0 Quality Control Testing and Reporting.** Testing shall be performed per the test method and frequency specified in the ITP. All personnel who perform sampling or testing shall be certified in the MoDOT Technician Certification Program for each test that they perform.

**3.1 Reporting of Test Results.** All QC test reports shall be submitted as soon as practical, but no later than the day following the test. Test data shall be immediately provided to the engineer upon request at any time, including prior to the submission of the test report. No payment will be made for the work performed until acceptable QC test results have been received by the engineer and confirmed by QA test results.

**3.1.1** Test results shall be reported on electronic forms provided by MoDOT. Forms and Contractor Reporting Excel2Oracle Reports (CRE2O) can be found on the MoDOT website. All required forms, reports and material certifications shall be uploaded to a Microsoft SharePoint® site provided by MoDOT, and organized in the file structure established by MoDOT.

**3.2 Non-Conformance Reporting.** A Non-Conformance Report (NCR) shall be submitted by the contractor when the contractor proposes to incorporate material into the work that does not meet the testing requirements or for any work that does not comply with the contract terms or specifications.

**3.2.1** Non-Conformance Reporting shall be submitted electronically on the Non-Conformance Report form provided on the MoDOT Website. The NCR shall be uploaded to the MoDOT SharePoint® site and an email notification sent to the engineer.

**3.2.2** The contractor shall propose a resolution to the non-conforming material or work. Acceptance of a resolution by the engineer is required before closure of the non-conformance report.

#### **4.0 Work Planning and Scheduling.**

**4.1 Two-week Schedule.** Each week, the contractor shall submit to the engineer a schedule that outlines the planned project activities for the following two-week period. The two-week schedule shall detail all work and traffic control events planned for that period and any Hold Points specified by the engineer.

**4.2 Weekly Meeting.** When work is active, the contractor shall hold a weekly project meeting with the engineer to review the planned activities for the following week and to resolve any outstanding issues. Attendees shall include the engineer, the contractor superintendent or project manager and any foreman leading major activities. This meeting may be waived when, in the opinion of the engineer, a meeting is not necessary. Attendees may join the meeting in person, by phone or video conference.

**4.3 Pre-Activity Meeting.** A pre-activity meeting is required in advance of the start of each new activity, except when waived by the engineer. The purpose of this meeting is to review

construction details of the new activity. At a minimum, the discussion topics shall include: safety precautions, QC testing, traffic impacts, and any required Hold Points. Attendees shall include the engineer, the contractor superintendent and the foreman who will be leading the new activity. Pre-activity meetings may be held in conjunction with the weekly project meeting.

**4.4 Hold Points.** Hold Points are events that require approval by the engineer prior to continuation of work. Hold Points occur at definable stages of work when, in the opinion of the engineer, a review of the preceding work is necessary before continuation to the next stage.

**4.4.1** A list of typical Hold Point events is available on the MoDOT website. Use of the Hold Point process will only be required for the project-specific list of Hold Points, if any, that the engineer submits to the contractor in advance of the work. The engineer may make changes to the Hold Point list at any time.

**4.4.2** Prior to all Hold Point inspections, the contractor shall verify the work has been completed in accordance with the contract and specifications. If the engineer identifies any corrective actions needed during a Hold Point inspection, the corrections shall be completed prior to continuing work. The engineer may require a new Hold Point to be scheduled if the corrections require a follow-up inspection. Re-scheduling of Hold Points require a minimum 24-hour advance notification from the contractor unless otherwise allowed by the engineer.

**5.0 Quality Assurance Testing and Inspection.** MoDOT will perform quality assurance testing and inspection of the work, except as specified herein. The contractor shall utilize the inspection checklists provided in the ITP as a guide to minimize findings by MoDOT inspection staff. Submittal of completed checklists is not required, except as specified in 5.1.

**5.1** Inspection and testing required in the production of concrete for the project shall be the responsibility of the contractor. Submittal of the 501 Concrete Plant Checklist is required.

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

K. Testing Modifications

**1.0 Description.** The predominant use of base rock on this project is for entrances, sidewalks, and ADA curb ramps. Concrete base and pavement are patchwork. Paved approaches, sidewalks, and curb will frequently be poured from the same truckload of concrete at a frequency of one or two trucks per day. This JSP revises the Inspection and testing Plan (ITP). Specifically, it revises some of the QC testing frequencies to better match the nature of work and not cause an undue burden on the contractor.

**2.0 Compaction Test on Base Rock Under Sidewalk ADA Ramps and Paved Approaches in the Field.** (Revises Sec 304.3.4) The required frequency of one per day will be modified to one per 600 tons.

**3.0 Gradation Test on Base Rock Under Sidewalk ADA Ramps and Paved Approaches.** (Revises Sec 304.4.1) The standard ITP requires one test per 250 tons with a minimum of one per week. The required frequency will be modified to one per 500 tons.

**4.0 Concrete Plan Checklists.** (Revises Sec 501) Submittal of the 501 Concrete Plant Checklist will be modified from once per day to once per week when the contractor is only pouring curb sidewalk, paved approaches, and ADA ramps.

**5.0 Concrete Median, Median Strip, Sidewalk, Curb Ramps, and Curb.** (Revises Sec 608) The required testing of one from the first truckload per day will be modified to the first truckload for the project and each 100 CUYDs for air and slump thereafter. Strength will be verified by use of cylinders or maturity meters at a minimum rate of one per 100 CUYD.

**6.0 Paved Approaches.** (Revises Sec 608) The required testing of one from the first truckload per day and each 100 CUYDs for air and slump will remain per specification. Strength will be verified by use of cylinders or maturity meters at a minimum rate of one per 100 CUYD.

**7.0 Curb Concrete.** (Revises Sec 609) The required frequency will be the same as Sec 5.0 above.

**8.0 Basis of Payment.** No direct payment will be made to the contractor to fulfill the above provision.

L. Utilities JSP-93-26F

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

| <u>Utility Name</u>   | <u>Known Required Adjustment</u> | <u>Type</u>   |
|---|----------------------------------|---------------|
| Paul Kaemmerer<br><b>Ameren Distribution</b><br>200 Lakefront Parkway<br>Edwardsville, IL 62025<br>Telephone: 618.900.5048<br>Email: paulk@utilitra.com   | No                               | Power         |
| Matt Adams<br><b>Ameren Transmission</b><br>1901 Choteau Ave<br>PO Box 66149<br>St. Louis, MO 63166<br>Telephone: 314.614.6077<br>Email: madams@ameren.com  | No                               | Power         |
| Tonya Wells & Wade Weakly<br><b>AT&amp;T (Distribution)</b><br>402 N 3 <sup>rd</sup> St<br>St Charles, MO 63301<br>Telephone: (TW): 636.448.9607 & (WW): 636.692.3326<br>Email: tw2745@att.com & ww8571@att.com | No                               | Communication |
| Nathan Welch<br><b>Charter</b><br>101 Northwest Plaza<br>St. Ann, MO 63074  | No                               | Communication |

|  |                        |               |
|--|------------------------|---------------|
| Telephone: 636. 232.1398<br>Email: <a href="mailto:nathan.welch@charter.com">nathan.welch@charter.com</a>  |                        |               |
| Brian Gass<br><b>Everstream</b><br>900 Walnut St.<br>UNIT 150, St. Louis, MO 63102<br>Telephone: 618.560.9850<br>Email: <a href="mailto:bgass@everstream.net">bgass@everstream.net</a>   | No                     | Communication |
| Ray Brooman<br><b>Missouri American Water</b><br>727 Craig Rd<br>St. Louis, MO 63141<br>Telephone: 314.996.2396<br>Email: <a href="mailto:ray.brooman@amwater.com">ray.brooman@amwater.com</a>                                 | No                     | Water         |
| Scott Halter<br><b>St Louis County Department of Transportation</b><br>41 S. Central Ave<br>Clayton, Mo 63105<br>Telephone 314.615.0202<br>Email: <a href="mailto:shalter@stlouiscountymo.gov">shalter@stlouiscountymo.gov</a> | <b>Yes<br/>See 3.7</b> | Communication |
| Nick Eggert<br><b>Spire Energy</b><br>6400 Graham Rd<br>Berkeley, MO 63134<br>Telephone: 314.330.5720<br>Email: <a href="mailto:nicholas.eggert@spireenergy.com">nicholas.eggert@spireenergy.com</a>                           | No                     | Gas           |

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

**1.2** The contractor agrees that any effects of the presence of the utilities, their relocation, contractor's coordination of work with the utilities and any delay in utility relocation shall not be compensable as a suspension of work, extra work, a change in the work, as a differing site condition or otherwise including but, without limitation, delay, impact, incidental or consequential damages. The contractor's sole remedy for the effects of the presence of utilities, delay in their relocation or any other effects shall be an excusable delay as provided in Section 105.7.3. The contractor waives, for itself, its subcontractors and suppliers the compensability of the presence of utilities, delay in their relocation and any cost to the contractor, its subcontractors and suppliers in any claim or action arising out of or in relation to the work under the contract.

**1.3** The contractor shall be solely responsible and liable for incidental and consequential damage to any utility facilities or interruption of the service caused by it or its subcontractors operation. The contractor shall hold and save harmless the Commission from damages to any utility facilities interruption of service by it or its subcontractor's operation.

**2.0** It shall be noted by the contractor that MoDOT is a member of Missouri One Call (800 Dig Rite). Some work on this project may be in the vicinity of MoDOT utility facilities, which includes but is not limited to traffic signal cables, highway lighting circuits, ITS cables, cathodic protection cables, etc. Prior to beginning work, the contractor shall request locates from Missouri One Call. The contractor shall also complete the Notice of Intent to Perform Work form located at the Missouri Department of Transportation website:

<http://www.modot.mo.gov/asp/intentToWork.shtml>

The contractor shall submit the form over the web (preferred method) or by fax to the numbers on the printed form. The notice must be submitted a minimum of 2 and a maximum of 10 working days prior to excavation just as Missouri One Call requires.

### **3.1 Ameren (Distribution)**

Ameren Distribution has the following existing facilities within the project limits:

#### **Overhead facilities crossing Hwy 67 at A1072**

- Overhead facilities at Sta 117+52, 121' Lt to Sta 117+22, 80' Rt. No conflict with this facility is anticipated.
- Overhead facilities at Sta 117+78, 86' Lt to Sta 118+14, 67' Rt. No conflict with this facility is anticipated.

#### **Overhead facilities along Southbound lanes of Hwy 67 at A1072**

- Overhead facilities at Sta 116+98, 66' Lt to Sta 122+42, 42' Lt. No conflict with this facility is anticipated.

#### **Overhead facilities crossing Hwy 67 at A1074**

- Overhead facilities at Sta. 253+25, 93' Rt to Sta. 253+68, 133' Lt crossing over Hwy 67. No conflict with this facility is anticipated.

#### **Overhead facilities along Northbound lanes of Hwy 67 at A4514**

- Overhead facilities from approximate Sta. 237+20, 208' Rt to Sta. 243+00, 88' Rt. No conflict with this facility is anticipated.

#### **Overhead facilities along Southbound lanes of Hwy 67 at A4514**

- Overhead facilities from Sta.237+00, 165' Lt to Sta. 241+98, 73' Lt. No conflict with this facility is anticipated.

#### **Overhead facilities crossing Hwy 67 at A4514**

- Overhead facilities at Sta. 241+98, 73' Lt. to Sta. 241+60, 118'Rt. No conflict with this facility is anticipated.

The contractor shall coordinate with Ameren-Missouri as necessary and take measures to protect in place their existing facilities during construction.

The contractor shall directly contact Ameren-Missouri (Distribution) to verify the locations of their facilities.

The Commission cannot warrant the information above which was provided by Ameren-Missouri (Distribution).

The contractor shall discuss the planned work as it relates to Ameren Missouri's energized power lines and coordinate with Ameren Missouri for the installation of any insulation covers over the lines and/or any other designated requirements. Please note Ameren Missouri has revised its policy regarding the charges for placement, length of use and relocation of covers. The contractor is advised to contact Ameren Missouri regarding the current policy so the anticipated cost to the contractor can be estimated and a tentative schedule for this payment can be established. The Contractor shall contact Ameren Missouri at least two weeks in advance of when construction work is scheduled to begin to request covers to be placed at a given location.

### **3.2 Ameren (Transmission)**

Ameren Transmission has the following existing facilities within the project limits:

#### **Overhead facilities crossing Hwy 67 at A1072**

- Overhead facilities at Sta 116+93, 73' Lt to Sta 217+27, 73' Rt. No conflict with this facility is anticipated.
- Overhead facilities at Sta 116+98, 66' Lt to Sta 217+31, 80' Rt. No conflict with this facility is anticipated.

### **3.3 AT&T (DISTRIBUTION)**

AT&T Distribution has the following existing facilities within the project limits:

#### **Underground facilities along Southbound lanes of Hwy 67 at A1072**

- Buried facilities from approximate Sta. 115+00, 76' Lt to Sta. 122+00, 32' Lt. No conflict with this facility is anticipated.

#### **Overhead facilities along Northbound lanes of Hwy 67 at A1074**



- Overhead facilities at approximate Sta. 250+27, 85' Rt to Sta. 256+45, 81' Rt. No conflict with this facility is anticipated.

#### **Underground facilities along Southbound lanes of Hwy 67 at A4514**

- Buried facilities from approximate Sta. 236+45, 187' Lt to Sta. 242+00, 73' Lt running. No conflict with this facility is anticipated.

#### **Underground facilities crossing under Hwy 67 at A4514**

- Buried facilities from approximate Sta. 236+45, 187' Lt to Sta. 236+01, 286' Rt. No conflict with this facility is anticipated.

ATT-D has at grade access points for its facilities at various locations throughout the project. Some of these access points may need to be adjusted to new grades. The contractor shall coordinate directly with ATT-D for these adjustments. ATT-D's representative for this will be as follows:

- Wade Weakly (ph: 636.795.3574, email: [ww8571@att.com](mailto:ww8571@att.com) )

The contractor shall contact ATT-D a minimum of 4 weeks ahead of need for adjustment.

The contractor shall coordinate with ATT-D, as necessary, and take measures to protect in place their existing facilities during construction.

The contractor shall directly contact ATT-D to verify the locations of their facilities.

The Commission cannot warrant the information above which was provided by ATT-D.

The contractor shall coordinate with ATT-D as necessary and take measures to protect in place their existing facilities during construction.

The contractor shall directly contact ATT-D to verify the locations of their facilities.

The Commission cannot warrant the information above which was provided by ATT-D.

### **3.4 Charter**

Charter has the following existing facilities in conflict within the project limits:

#### **Overhead facilities along Northbound lanes of Hwy 67 at A1074**

- Overhead facilities at approximate Sta. 250+27, 85' Rt to Sta. 256+45, 81' Rt. No conflict with this facility is anticipated.

#### **Overhead facilities along Northbound lanes of Hwy 67 at A4514**

- Overhead facilities from approximate Sta. 237+20, 208' Rt to Sta. 243+00, 88' Rt. No conflict with this facility is anticipated.

#### **Overhead facilities along Southbound lanes of Hwy 67 at A4514**

- Overhead facilities from Sta.237+00, 165' Lt to Sta. 241+98, 73' Lt. No conflict with this facility is anticipated.

#### **Overhead facilities crossing Hwy 67 at A4514**

- Overhead facilities at Sta. 241+98, 73' Lt. to Sta. 241+60, 118'Rt. No conflict with this facility is anticipated.

#### **Underground facilities crossing under Hwy 67 at A4514**

- Buried facilities from approximate Sta. 236+30, 187' Lt to Sta. 237+21, 113' Rt. No conflict with this facility is anticipated.

### **3.5 Everstream**

Everstream has the following existing facilities in conflict within the project limits:

#### **Underground facilities along Northbound lanes of Hwy 67 at A4514**

- Buried facilities from approximate Sta. 247+93, 81' Rt to Sta. 237+25, 204' Rt. No conflict with this facility is anticipated.

### **3.6 MAWC**

MAWC has the following existing facilities in conflict within the project limits:

#### **Overhead facilities along Southbound lanes of Hwy 67 at A1074**

- Buried facilities at approximate Sta. 247+50, 88' Lt to Sta. 257+00, 98' Lt. No conflict with this facility is anticipated.

#### **Underground facilities along Northbound lanes of Hwy 67 at A4514**

- Buried facilities from approximate Sta. 237+37, 173' Rt to Sta. 242+03, 121' Rt. No conflict with this facility is anticipated.

#### **Underground facilities along Southbound lanes of Hwy 67 at A4514**

- Buried facilities from approximate Sta. 236+31, 215' Lt to Sta. 242+37, 85' Lt. No conflict with this facility is anticipated

#### **Underground facilities crossing Hwy 67 North of A4514**

- Buried facilities from approximate Sta. 240+47, 116' Lt to Sta. 241+04, 122' Rt running under Rt 180. No conflict with this facility is anticipated.

MAWC has at grade access points for its facilities at various locations throughout the project. Some of these access points may need to be adjusted to new grades. The contractor shall coordinate directly with MAWC for these adjustments. MAWC's representative for this will be as follows:

- Ray Brooman (ph: 314.996.2396; email: [ray.brooman@amwater.com](mailto:ray.brooman@amwater.com))

The contractor shall contact MAWC a minimum of 4 weeks ahead of need for adjustment.

The contractor shall coordinate with MAWC, as necessary, and take measures to protect in place their existing facilities during construction.

The contractor shall directly contact MAWC to verify the locations of their facilities.

The Commission cannot warrant the information above which was provided by MAWC.

The contractor shall coordinate with MAWC as necessary and take measures to protect in place their existing facilities during construction.

The contractor shall directly contact MAWC to verify the locations of their facilities.

The Commission cannot warrant the information above which was provided by MAWC.

### **3.7 St Louis County Department of Transportation**

St Louis County has the following existing facilities in conflict within the project limits:

#### **Underground facilities along Southbound lanes of Hwy 67 at A1072**

- Facilities from approximate Sta. 116+00, 39' Lt to Sta. 121+00, 40' Lt in a joint conduit run with MoDOT ITS, attached on the North exterior side of the bridge deck. Contractor to keep facilities connected and lay conduit on temporary supports during construction as approved by the engineer. Reattach conduit on the exterior of bridge as approved by the engineer.

### **3.8 Spire**

Spire has the following existing facilities in conflict within the project limits:

#### **Above ground facilities along Southbound lanes of Hwy 67 at A1072**

- 8" main stacked on a 20" main from approximate Sta. 116+56, 66' Lt to Sta. 120+84, 64' Lt. No conflict with this main is anticipated, contractor to proceed with caution and inform Spire agent of activity before construction start date, representative to be on site.

#### **Underground crossing Hwy 67 at A1072**

- 8" main from Sta. 116+56, 66' Lt to Sta. 116+51, 2' Rt. No conflict with this facility is anticipated.

- 20" Main from Sta. 116+65, 60' Lt to Sta. 116+58, 32' Rt. No conflict with this facility is anticipated.
- 8" main from Sta. 120+84, 64' Lt to Rt to Sta. 120+79, 20' Rt. No conflict with this facility is anticipated.
- 20" main from Sta. 120+96, 58' Lt to Sta. 120+91, 10' Rt. No conflict with this facility is anticipated.

#### **Underground facilities along Northbound lanes of Hwy 67 at A1074**

- 20" Main from approximate Sta. 248+85, 85' Rt to Sta. 256+00, 43' Rt. 20" Main crosses proposed guardrail. Protect in place. Contractor to proceed with caution and inform Spire agent of activity before construction start date, representative to be on site.
- 8" Main from approximate Sta. 250+00, 109' Rt to Sta. 256+00, 85' Rt. No conflict with this facility is anticipated.

#### **Underground facilities along Northbound lanes of Hwy 67 at A4514**

- Buried facilities from approximate Sta. 236+20, 216' Rt to Sta. 245+10, 72' Rt. No conflict with this facility is anticipated.

#### **Underground facilities along Northbound lanes of Hwy 67 at A4514**

- Buried facilities from approximate Sta. 242+71, 104' Lt to Sta. 245+08, 47' Lt. No conflict with this facility is anticipated.

#### **Underground crossing Hwy 67 at A4514**

- Buried facilities from approximate Sta. 245+10, 72' Rt to Sta. 245+08, 47' Lt. No conflict with this facility is anticipated.

Spire has at grade access points for its facilities at various locations throughout the project. Some of these access points may need to be adjusted to new grades. The contractor shall coordinate directly with Spire for these adjustments. Spire's representative for this will be as follows:

- Nick Eggert (ph: 314.330.5720, email: Nicholas.Eggert@spireenergy.com )

The contractor shall contact Spire a minimum of 4 weeks ahead of need for adjustment.

The contractor shall coordinate with Spire, as necessary, and take measures to protect in place their existing facilities during construction.

The contractor shall directly contact Spire to verify the locations of their facilities.

The Commission cannot warrant the information above which was provided by Spire.

The contractor shall coordinate with Spire as necessary and take measures to protect in place their existing facilities during construction.

The contractor shall directly contact Spire to verify the locations of their facilities.

The Commission cannot warrant the information above which was provided by Spire.

#### **4.0 Existing Utility Facilities Located in Close Proximity to Proposed Work**

The contractor is advised there are existing utility facilities located in close proximity to proposed work. The contractor may need to use shoring to avoid conflicts with utility facilities. The contractor is advised that the cost for this shoring is incidental. No direct payment will be made to the contractor to recover the cost of equipment, labor, materials or time required to fulfill the above provision.

#### **5.0 Utility Coordination by Contractor and any Necessary Potholing of Utility Facilities**

Utility Companies with utility adjustments advised they anticipate completing their relocation work during construction in coordination with the contractor. The contractor shall take an active role in verifying that the utility work is complete. The contractor shall directly contact each utility company about the status of their relocation work. The contractor shall submit/coordinate one call tickets early enough at specific locations of planned work to verify everything is marked and if there are questions about old and relocated facilities, so the issues can be addressed in field by utility locators in a timely manner.

The contractor shall also pothole any necessary buried utility facilities in the project limits to verify the buried facilities are deep enough for the roadway improvements and not damage the utility facility. Any utilities determined to be in conflict or that appear to be in conflict with construction shall be brought to the attention of the Engineer immediately. The Engineer shall determine course of action to remedy the situation. It may be necessary to shallow up rock lining, rock blanket or shift pipe installation to avoid a utility relocation.

No direct payment will be made to the contractor to recover the cost of equipment, labor, materials or time required to fulfill the above provision.

#### **M. ADA Compliance and Final Acceptance of Constructed Facilities JSP-10-01C**

**1.0 Description.** The contractor shall comply with all laws pertaining to the Americans with Disabilities Act (ADA) during construction of pedestrian facilities on public rights of way for this project. An ADA Checklist is provided herein to be utilized by the contractor for verifying compliance with the ADA law. The contractor is expected to familiarize himself with the plans involving pedestrian facilities and the ADA Post Construction Checklist prior to performing the work.

**2.0 ADA Checklist.** The contractor can locate the ADA Checklist form on the Missouri Department of Transportation website:

<https://www.modot.org/forms-contractor-use>

**2.1** The ADA Checklist is not to be considered all-inclusive, nor does it supersede any other contract requirements. The ADA checklist is a required guide for the contractor to use during the construction of the pedestrian facilities and a basis for the commission's acceptance of work. Prior to work being performed, the contractor shall bring to the engineer's attention any planned work that is in conflict with the design or with the requirement shown in the checklist. This notification shall be made in writing. Situations may arise where the checklist may not fully address all requirements needed to construct a facility to the full requirements of current ADA law. In those situations, the contractor shall propose a solution to the engineer that is compliant with current ADA law using the following hierarchy of resources: 2010 ADA Standards for Accessible Design, Draft Public Rights of Way Accessibility Guidelines (PROWAG) dated November 23, 2005, MoDOT's Engineering Policy Guidelines (EPG), or a solution approved by the U.S. Access Board.

**2.2** It is encouraged that the contractor monitor the completed sections of the newly constructed pedestrian facilities in attempts to minimize negative impacts that his equipment, subcontractors or general public may have on the work. Completed facilities must comply with the requirements of ADA and the ADA Checklist or have documented reasons for the non-compliant items to remain.

### **3.0 Coordination of Construction.**

**3.1** Prior to construction and/or closure on an existing pedestrian path of travel, the contractor shall submit a schedule of work to be constructed, which includes location of work performed, the duration of time the contractor expects to impact the facility and an accessible signed pedestrian detour compliant with MUTCD Section 6D that will be used during each stage of construction. This plan shall be submitted to the engineer for review and approval at or prior to the pre-construction conference. Accessible signed detours shall be in place prior to any work being performed that has the effect of closing an existing pedestrian travel way.

**3.2** *When consultant survey is included in the contract, the contractor shall use their survey crews to verify that the intended design can be constructed to the full requirements as established in the 2010 ADA Standards. When 2010 ADA Standards do not give sufficient information to construct the contract work, the contractor shall refer to the PROWAG.*

**3.3** When consultant survey is not included in the contract, the contractor shall coordinate with the engineer, prior to construction, to determine if additional survey will be required to confirm the designs constructability.

**4.0 Final Acceptance of Work.** The contractor shall provide the completed ADA Checklist to the engineer at the semi-final inspection. ADA improvements require final inspection and compliance with the ADA requirements and the ADA Checklist. Each item listed in the checklist must receive either a "YES" or an "N/A" score. Any item receiving a "NO" will be deemed non-compliant and shall be corrected at the contractor's expense unless deemed otherwise by the engineer. Documentation must be provided about the location of any non-compliant items that are allowed to remain at the end of the construction project. Specific details of the non-compliant items, the ADA requirement that the work was not able to comply with, and the specific reasons

that justify the exception are to be included with the completed ADA Checklist provided to the engineer.

**4.1** Slope and grade measurements shall be made using a properly calibrated, 2 foot long, electronic digital level approved by the engineer.

**5.0 Basis of Payment.** The contractor will receive full pay of the contract unit cost for all sidewalk, ramp, curb ramp, median, island, approach work, cross walk striping, APS buttons, pedestrian heads, detectible warning systems and temporary traffic control measures that are completed during the current estimate period as approved by the engineer. Based upon completion of the ADA Checklist, the contractor shall complete any necessary adjustments to items deemed non-compliant as directed by the engineer.

**5.1** 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 documents.

N. ADA Curb Ramps – St. Louis District Version 01-17-24

**1.0 Description.** This work shall consist of constructing new concrete curb ramps that are compliant with current Americans with Disabilities Act (ADA) and MoDOT guidelines at locations shown on the plans and as directed by the engineer.

**1.1** The contractor shall ensure that the persons establishing the grades of the ADA facilities have a copy of ADA related provisions at hand for reference. If it is found that written provisions for ADA facilities are not at hand, the engineer may cause ADA work to be ceased until a copy arrives.

**2.0 Construction Requirements.** Except as noted herein, all applicable provisions in Sec 608 of the Standard Specifications shall apply to the construction of the curb ramps.

**2.1** The following shall be included in the cost of a new ADA ramp:

- Excavation and preparing of the subgrade prior to placement of the aggregate base
- 4" Type 5 Aggregate Base underneath the new ramp
- Everything shown in the various figures of ADA ramp curb types on Standard Plan 608.50 shall be poured as 7" concrete. This includes all area of ramp, level landing pads and any flares included in the per each ADA Ramp.
- Variable height curb along the roadway within the limits of the new ADA ramp
- Variable height curb along the backside of the new ADA ramp
- Concrete median used to separate direction of travel within a dual perpendicular ramp
- Furnishing and installing any reinforcement needed as shown in the plans for curbs taller than 8"
- Tinting of concrete surface as required in the plans
- Seed or Sod next to the curb ramp

- Saw Cuts needed for the removal of the existing concrete area where the new ADA ramp is being constructed
- Removal of the existing concrete area where the new ADA ramp is being constructed

**2.1.1** Regardless of the number of ramp areas or surfaces having a maximum ramp slope of 1V:12H (8.33%) that are constructed for a particular type of ADA Curb Ramp, the contractor **will not** be paid for additional number of ramps at that location. See special sheet for curb ramp pay limits. Exception: **Dual Perpendicular Ramps and Blended Transitions** will be paid as 2 each.

**2.2** The following shall be paid for separately in the cost of a new ADA ramp:

- Truncated Domes

**2.2.1** Detectable warning surfaces shall be provided, where a curb ramp, landing, or blended transition connects to a street. Where commercial or private driveways are provided with traffic control devices or otherwise are permitted to operate like public streets, detectable warnings should be provided at the junction between the pedestrian route and the street. See plans for additional details.

**2.2.2** The truncated domes shall come from Materials' Pre-Qualified List FS-1067 Table 1 from the following link:

<https://www.modot.org/materials>

**2.3 Gutter Correction.** The contractor shall establish the grade of the flow line of the gutter before establishing the grades of ADA facilities. The gutter line shall be free flowing with no ponding next to the curb. Under-performing gutters shall be replaced with a concrete curb and gutter or a minimum 1.75-inch thick asphalt mill and fill. Running or standing storm water shall not be pushed out into the roadway where it may be splashed on pedestrians by passing vehicles or cause a hydroplaning hazard. An asphalt mill and fill shall be a minimum of 1.75 inches thick and the edges shall be at a smooth milled butt joint. The contractor shall use an approved BP-1 mix for all corner asphalt mill and fill work unless another surface asphalt mix is specified elsewhere in the contract. Asphalt mill and fill is included in the work of ADA Curb Ramps. If asphalt mill and fill is needed at a corner without any other ADA work, it will be found as a separate line item in this contract.

## **2.4 Design Plans**

**2.4.1** Recommendations for the design type of each curb ramp to be built on this project are shown on the plans. Curb ramps constructed by the contractor may vary from the original design, with approval from the engineer, in size, shape, and location as necessary to comply with ADA laws. It is the contractor's responsibility to inspect locations in the field before bidding to verify quantities needed to satisfy this provision. No additional pay will be made to the contractor if the original design is adjusted, and a different ramp type is constructed instead of the recommended/suggested in the plans.



**2.4.2** ADA provides some exceptions to ramp slope where space limitations exist. The apparent construction limits shown on the plans are not considered a space limitation. The contractor shall not place any ADA exceptions without consulting the Engineer on a case-by-case basis.

**2.4.3 Special Sheet.** A special sheet shows the pay limits for each standard ADA ramp type used by MoDOT. This special sheet is not intended to replace the Standard Plans, Standard specifications or MoDOT's ADA checklist but is intended only to provide consistency regarding pay lengths/limits within the St. Louis District.

As shown on this special sheet, 15 feet beyond the landing is considered part of the ADA ramp. Payment for the ramp will be 15 feet beyond the landing and no adjustment in sidewalk length/quantity will be made if this 15-foot ramp length is adjusted by the contractor in the field.

**2.4.4** When a project is **only** replacing ADA Curb Ramps at intersections, a warping panel shall be included and considered incidental to the cost of the new ADA Curb Ramp. When a project is also constructing new sidewalk tied into the new ADA Curb Ramp, this warping panel shall be paid for within the sidewalk pay item. A warping panel consists of tying in an ADA compliant cross slope to an existing cross slope.

**2.5 Median or Median Island Cut-throughs.** If there is an actual ramp with a slope not exceeding 8.33% (1V:12H) that provides access to the **raised portion** of the island or median instead of cutting through a portion of the island or median, then that area of concrete will be paid for separately as an ADA Curb Ramp, per each, as noted below. If the pedestrian path cuts through an island or median, then this area is not considered a ramp and will be paid for with individual items necessary to construct this pedestrian path.

**2.6 Prosecution of Work.** The contractor shall have all necessary personnel, equipment, and materials at hand for all work at each location before the work begins so that work may proceed without delay.

**3.0 Method of Measurement.** Final measurement will not be made for each ramp except for authorized changes during construction or where appreciable errors are found in the contract quantity. The revision or correction will be computed and added to or deducted from the contract quantity.

**4.0 Basis of Payment.** The accepted quantity of ADA compliant curb ramps will be paid at the contract unit price for the following items:.

| Item No.  | Units | Description                           |
|-----------|-------|---------------------------------------|
| 608-99.02 | Each  | ADA Curb Ramp without Truncated Domes |

O. Lump Sum Temporary Traffic Control JSP-22-01A

**1.0 Delete Sec 616.11 and insert the following:**

**616.11 Method of Measurement.** Measurement for relocation of post-mounted signs will be made to the nearest square foot of sign area only for the signs designated for payment on the plans. All other sign relocations shall be incidental. Measurement for construction signs will be

made to the nearest square foot of sign area. Measurement will be made per each for each of the temporary traffic control items provided in the contract.

**616.11.1 Lump Sum Temporary Traffic Control.** No measurement will be made for temporary traffic control items grouped and designated to be paid per lump sum. The list of lump sum items provided in the plans or contract is considered an approximation and may be subject to change based on field conditions. This is not a complete list and may exclude quantities for duplicate work zone packages used in simultaneous operations. The contractor shall provide all traffic control devices required to execute the provided traffic control plans for each applicable operation, stage, or phase. No measurement will be made for any additional signs or devices needed except for changes in the traffic control plan directed by the engineer.

**2.0 Delete Sec 616.12 and insert the following:**

**616.12 Basis of Payment.** All temporary traffic control devices authorized for installation by the engineer will be paid for at the contract unit price for each of the pay items included in the contract. Whether the devices are paid individually, or per lump sum, 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) Worker apparel.
- (f) Flagger, AFADs, PFDs, pilot vehicles, and appurtenances at flagging stations.
- (g) Furnishing, installing, operating, maintaining, and removing construction-related vehicle and equipment lighting.
- (h) Construction and removal of temporary equipment crossovers, including restoring pre-existing crossovers.
- (i) Provide and maintaining work zone lighting and work area lighting.

**616.12.1 Lump Sum Temporary Traffic Control.** Traffic control items grouped together in the contract or plans for lump sum payment shall be paid incrementally per Sec 616.12.1.1. Alternately, upon request from the contractor, the engineer will consider a modified payment schedule that more accurately reflects completion of traffic control work. No payment will be made for any additional signs or devices needed except for changes in the traffic control plan directed by the engineer. Additional items directed by the engineer will be paid for in accordance with Sec 109.4. No adjustment to the price will be made for overruns or underruns of other work or for added work that is completed within existing work zones.

**616.12.1.1 Partial payments.** For purposes of determining partial payments, the original contract amount will be the total dollar value of all original contract line items less the price for Lump Sum Temporary Traffic Control (LSTTC). If the contract includes multiple projects, this determination will be made for each project. Partial payments will be made as follows:

- (a) The first payment will be made when five percent of the original contract amount is earned. The payment will be 50 percent of the price for LSTTC, or five percent of the original contract amount, whichever is less.
- (b) The second payment will be made when 50 percent of the original contract amount is earned. The payment will be 25 percent of the price for LSTTC, or 2.5 percent of the original contract amount, whichever is less.
- (c) The third payment will be made when 75 percent of the original contract amount is earned. The payment will be 20 percent of the price for LSTTC, or two percent of the original contract amount, whichever is less.
- (d) Payment for the remaining balance due for LSTTC will be made when the contract has been accepted for maintenance or earlier as approved by the engineer.

**616.12.1.2** Temporary traffic control will be paid for at the contract lump sum price for Item:

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

P. Pavement Marking Removal

**1.0 Description.** This work shall consist of all necessary operations for removal of existing pavement marking lines and intersection markings as shown on the plans or directed by the engineer.

**2.0 Construction Requirements.** The pavement marking removal shall be removed in accordance with Section 620.50.2 except for the following: The approved method allowed to remove pavement marking will be water blasting or as directed by the engineer.

**3.0 Method of Measurement.** Measurement for pavement marking removal shall be in accordance with Section 620.50.3.

**4.0 Basis of Payment.** The accepted quantity of pavement marking removal will be paid for at the contract unit price for each of the pay items included in the contract.

| Item No.  | Units    | Description                        |
|-----------|----------|------------------------------------|
| 620-70.01 | Lin. Ft. | Pavement Marking Removal           |
| 620-70.02 | Each     | Pavement Marking Removal (Symbols) |

Q. Curb Reflector

**1.0 Description.** This work consists of furnishing, transporting and installing curb reflectors of the type and spacing specified in the roadway plans. All work shall comply with 620 of Missouri Standard Specifications for Highway Construction, performed to the satisfaction of the engineer and/or City, and include cost of equipment, labor, materials and time required to complete said work.

**1.1 General.** The surface of the curb to which the reflector shall be applied shall be free of dirt, curing compound, moisture, paint, or any other material which would adversely affect the bond of the adhesive. Cleaning of the surface shall be to the satisfaction of the Engineer. An adhesive, meeting the reflector manufacturer's specifications, shall be placed either on the surface or the bottom of the reflector in sufficient quantity to ensure complete coverage of the contact area with no voids present and with a slight excess after the reflector is pressed firmly in place.

The installed height of the prismatic curb reflectors shall be a maximum of 3/4 in. above the mounting surface. The unit shall have one reflective surface that is placed approximately perpendicular to the mounting surface.

**1.2 Basis of Payment.** Payment will be made as follows:

| Item No.  | Type | Description    |
|-----------|------|----------------|
| 620-99.02 | Each | Curb Reflector |

R. Traffic Signal Maintenance and Programming

**1.0 Description.** Traffic signal maintenance and timing for this project shall be in accordance with Section 902 of the Standard Specifications, and specifically as follows.

**2.0 Qualified Traffic Engineer**

**2.1** The contractor shall have an experienced traffic engineer with a Professional Engineer's (PE) license in Missouri as well as a Professional Traffic Operations Engineer (PTOE) certification (hereafter referred to as "contractor's traffic engineer") with the noted experience defined below. MoDOT shall approve the traffic engineer prior to them being hired.

**2.2 Experience.** Any proposed contractor traffic engineer shall be able to demonstrate personal successful previous experience in the following tasks:

**2.2.1 Response.** The contractor's traffic engineer shall have the ability to be on site within 1 hour of being requested.

**2.2.2 Corridor Management:** Time/space diagram manipulation in order to successfully adjust offsets and splits for rapidly changing traffic demands during construction.

**2.2.3 Controller Programming:** Ability to hand program and software Phase, TBC, and Coordination levels of Siemens controllers along with NTCIP-compatible controllers.

**2.2.4 Intersection Programming:** Implementation of adjusted and/or new timing plans as a result of changing traffic demand.

**2.2.5 Signal Software.** Use and understanding of both Siemens signal software and TransCore traffic control software.

**2.3** The contractor shall submit the name(s) of proposed traffic engineer(s) and the name(s) of other personnel on their proposed staff along with detailed experience in the tasks outlined in Paragraph 2.2 above. The engineer reserves the right to reject any contractor traffic engineer, before the start of work, who does not have sufficient experience or, at any point during the project, who does not satisfy the requirements set forth within this Job Special Provision. A list of potential traffic engineers can be submitted for review to the Project Manager and the Commission's Traffic Engineers prior to bid.

**2.4 VPN Access.** The Commission operates the noted signals through a central signal system which is capable of remote adjustments to controller programming.

**2.4.1** The approved contractor's traffic engineer and any staff assigned to manage the traffic signals during the project is encouraged to apply for VPN (Virtual Private Network) access with the engineer once the project is awarded. If approved, the engineer will assign a unique IP address to the contractor's traffic engineering staff, which will allow for remote access to the Commission's central signal control systems as appropriate and the ability to interface with the noted signals on this project.

### **3.0 Existing Traffic Signals and Communication System**

**3.1** The contractor shall notify the engineer 3 weeks prior to the date prior to the date of a ramp bridge closure, detour implementation or lane reduction. The contractor shall meet with the Engineer's representatives to discuss their traffic mitigation plan at least 1 week before the date of the first closure and as needed between construction stages. Traffic mitigation plan should be at a minimum include:

- Proposed Timing Plan changes and any models
- Anticipated locations of concern
- A map in electronic format displaying the locations and names of the signals and owning agency as detailed in Paragraphs 3.2 and 3.3 below.
- Other traffic mitigation efforts

**3.2** Once a ramp closure or lane reduction has been implemented by the contractor, the contractor shall then be solely responsible for the following signals' controller programming until completion of all closures necessary to complete the contractor's work. Maintenance at these locations for items other than controller programming issues or incidents caused by controller programming or other construction done by the contractor shall remain with the Commission. If any part of an existing traffic signal or its controller within the limits of this project has otherwise been modified or adjusted by the contractor, or the contractor makes any roadway changes to reduce the traffic capacity through a signalized intersection within the limits of the project, or the contractor begins work as at intersection with signals already in operation, the contractor shall then be solely responsible for that signal's controller programming and all signal maintenance as specified in 902.2 and 902.3, except for power costs, until Final Acceptance of the project. Traffic signal maintenance and timing responsibilities shall be broken down in accordance with the below schedules:

Signals Affected:

- a) US 67 & Lindsay Lane/St. Denis Street Intersection
- b) US 67 & Patterson Road Intersection
- c) US 67 & Sunswept Park Court Intersection
- d) U.S. 67 ramps at Taylor Road intersection
- e) U.S. 67 ramp/Old Dunn Road at Lynn Haven Lane intersection

**3.3** The engineer shall provide to the approved contractor 2 weeks notice an electronic report on the existing phasing and timing of each traffic signal, which may be the contractor's responsibility to program. The Engineer's representative shall be available to the contractor before any changes are made to a signal or controller to answer any questions about the report. In lieu of the report, the contractor's traffic engineer may obtain this information from the appropriate agency's central signal control system. Once the contractor has modified a signal or controller for any reason, the contractor shall be solely responsible for the existing timing plans and all subsequent timing changes.

**3.4** The contractor shall notify the Engineer or representative of the changes no later than 1 working day after changes are programmed if unable to provide advance notice as specified in 902.2. In addition, the Contractor shall notify the Engineer and the Commission's Traffic Engineers within one (1) hour of successful implementation of the detour plan.

**3.5** The contractor shall be solely responsible for maintaining the coordination at any affected signal to the satisfaction of the engineer or representative until completion of work as set forth in section 3.2 of the this provision. Maintenance of coordination may include the synchronization of the affected controller's internal time clocks to the second using an atomic clock, or other means approved by the engineer. If time clock synchronization is used, the contractor shall verify all affected controllers are synchronized at least 1 time per week with a report to the engineer or representative. This report will be in the form of a documentation record as spelled out in the Work Zone Traffic Management Plan.

#### **4.0 Existing Traffic Signal Maintenance and Response.**

**4.1** The contractor shall respond to any signal timing complaints or malfunction complaints for those locations detailed in Section 3.0 of this provision and as specified in Section 902.21.1. Response time shall be 1 hour for complaints received by the contractor between 6:00 a.m. and 6:00 p.m. on non-holiday weekdays, and 2 hours for all other times. For some cases (due to travel times or other extenuating circumstances) additional time may be acceptable within reason, but must be approved by the engineer. These timeframes will replace the '24 hour' response time in Section 105.14 for any signal-related incidents, where the entire cost of the work, if performed by MoDOT personnel or a third party, will be computed as described in Sec 108.9 and deducted from the payments due the contractor.

**4.2** The contractor must supply the contact name and phone number who will be responsible for receiving signal timing complaints for the Engineer. These complaints may be forwarded directly to the contractor by someone other than the engineer's representative and will not relieve the contractor from properly responding based on the response times of this Provision. The contractor shall submit to the engineer a weekly report of complaints received and remedies performed throughout the duration of this project.

#### **5.0 Original Signal Controller Programming and Acceptance**

**5.1** The contractor will be responsible for restoring the original signal controller programming at existing intersections and coordination plans for each intersection immediately upon ramp or bridge re-opening. The Engineer shall preserve and house the original controller files and provide the contractor with access to those files to perform the restoration of the original plans. Normal plan restoration can be done by a manual command in the signal control system or a preprogrammed time-of-day command change. For any locations rendered offline at the time of re-opening, these locations shall be returned to normal operation by hand. The Contractor shall notify the Engineer, the Commission's Traffic Engineers within one (1) hour of removal of the detour plans. The contractor will be relieved of signal programming maintenance at an existing restored intersection once 48 consecutive hours have passed without a programming malfunction, including restoring normal signal programming to the satisfaction of the Commission. If an agency desires any changes from an original plan, the agency will assume immediate maintenance of the signal to implement desired changes.

## **6.0 Post Project Report**

**6.1** The contractor shall submit to the engineer a post project report, four to six weeks after the final signal adjustments have been completed. The report shall include at a minimum an observation report, summary of timing changes and locations, summary of complaints, and any other pertinent information regarding the contractor's efforts for managing these signal corridors in one electronic document.

## **7.0 Deliverables**

**7.1** All deliverables mentioned in this provision shall be submitted to the engineer in a timely manner to the satisfaction of the engineer prior to receiving full compensation for this work.

- Experience submittal
- Preliminary Traffic Mitigation Plan
- Notification of Detour Implementation
- Time Base Reports, As Needed
- Complaint Resolutions
- Notification of Restoration to Normal Operations
- Post Project Report

**8.0 Construction Requirements.** Construction requirements shall conform to Sec 902, 1061, and 1092.

**9.0 Method of Measurement.** Method of measurement shall conform to Sec 902.

**10.0 Basis of Payment.** Payment will be considered full compensation for all contractor services, installation, and labor to complete the described work.

| <b>Item No.</b> | <b>Units</b> | <b>Description</b>                       |
|-----------------|--------------|--|
| 902-99.01       | Lump Sum     | Traffic Signal Maintenance & Programming |

### S. Adjusting Pull Box

**1.0 Description.** This work shall consist of adjusting pull boxes as shown on the plans or as directed by the engineer.

**2.0 Construction Requirements.** Adjustments shall be completed so that the finished sidewalk, ramp, approach, or pavement meets current ADA standards.

**3.0 Method of Measurement.** Measurement for adjusting pull boxes will be made per each and includes all necessary material, hardware, equipment, and necessary incidental items.

**4.0 Basis of Payment.** All costs associated with compliance with this special provision for all material, equipment, and labor shall be completely covered by the contract unit price for:

| Item No.  | Units | Description        |
|-----------|-------|--------------------|
| 902-99.02 | Each  | Adjusting Pull Box |

T. Optional Pavement JSP-06-06H

**1.0 Description.** This work shall consist of a pavement composed of either Portland cement concrete or asphaltic concrete constructed on a prepared subgrade. This work shall be performed in accordance with the standard specifications and as shown on the plans or established by the engineer.

**2.0** The quantities shown reflect the total square yards of pavement surface designated for each pavement type as computed and shown on the plans.

**2.1** No additional payment will be made for asphaltic concrete mix quantities to construct the required 1:1 slope along the edge of the pavement, or for tack applied between lifts of asphalt.

**2.2** No additional payment will be made for aggregate base quantities outside the limits of the final surface area as computed and shown on the plans. When A2 shoulders are specified, payment for aggregate base will be as shown on the plans.

**2.3** The contractor shall comply with Sections 401 through 403 for the asphalt option and Sections 501 and 502 for the concrete option.

**2.4** Pavement options composed of Portland cement concrete shall have contrast pavement marking for intermittent markings (skips), dotted lines, and solid intersection lane lines. The pavement markings shall be in accordance with Section 620. No additional payment will be made for the contrast pavement markings.

**3.0 Method of Measurement.** The quantities of concrete pavement will be measured in accordance with Section 502.14. The quantities of asphaltic concrete pavement will be measured in accordance with Section 403.22.

**4.0 Basis of Payment.** The accepted quantity of the chosen option will be paid for at the contract unit bid price for Item 401-99.05, Optional Pavement, per square yard.

**4.1** For projects with previously graded roadbeds, any additional quantities required to bring the roadway subgrade to the proper elevation will be considered completely covered by the pay item for Subgrading and Shouldering.



**4.2 Price Adjustment for Fuel.** If the contractor accepts the option for fuel adjustment in the bid proposal, a fuel adjustment will be applied in accordance with Sec 109.14 for the type of pavement constructed.

U. Optional Rumble Strips

**1.0 Description.** This work shall consist of constructing optional rumble strips as shown on the plans or as directed by the engineer.

**2.0 Construction Requirements.** Rumble strips shall be milled into bituminous and concrete pavements to produce a neat and uniform finish. Milled material shall be handled in accordance with Sec 622. Any damage to the pavement or pavement marking resulting from the contractor's operations shall be repaired or replaced to the satisfaction of the engineer by the contractor, at the contractor's expense. On roadways open to traffic, rumble strips shall be in place no later than five days after the final paving operations.

**3.0 Method of Measurement.** Final measurement will not be made except for authorized changes during construction or where appreciable errors are found in the contract quantity. Where required, rumble strips will be measured separately for each shoulder and the centerline, which will be measured along the centerline of the travel way, and made to the nearest 1/10 station. The revision or correction will be added to or deducted from the contract quantity.

**4.0 Basis of Payment.** The accepted quantity of rumble strips will be paid at the contract unit price per 1/10 station. Payment will be considered full compensation for all labor, equipment, and material necessary to complete the described work, including loading, hauling, stockpiling and disposal of milled material; and any other incidental items.

| Item No.  | Unit | Description            |
|-----------|------|------------------------|
| 626-99.09 | STA  | Optional Rumble Strips |

V. Removal and Delivery of Existing Signs JSP-12-01C

**1.0 Description.** All Commission-owned signs removed from the project shall be disassembled, stored, transported, and disposed of as specified herein. Sign supports, structures and hardware removed from the project shall become the property of the contractor.

**2.0 Disassembly and Delivery.**

**2.1** All Commission-owned signs, (excluding abandoned billboard signs), designated for removal in the plans, or any other signs designated by the Engineer, shall be removed from the sign supports and structures, disassembled, stored, transported, and delivered by the contractor to the recycling center for destruction.

**2.2** The contractor shall coordinate and make arrangements with the recycling center for delivery of the signs. Sign panels shall be disassembled and/or cut into sizes as required by the recycling center.

**2.3** The contractor shall provide the Engineer with a “Sign Delivery Certification” attesting to completion of delivery of all existing sign material from the project to the recycler. In addition, the contractor shall provide to the Engineer a final “Sign Certification of Destruction” from the recycler that documents the total pounds of scrap sign material received from the project and attests that all such material will not be re-purposed and will be destroyed in a recycling process. The contractor can locate the required certification statements from the Missouri Department of Transportation website:

<https://www.modot.org/forms-contractor-use>

**2.4** Funds received from the disposal of the signs from the recycling center shall be retained by the Contractor.

**3.0 Basis of Payment.** All costs associated with removing, disassembling and/or cutting, storing, transporting, and disposing of signs shall be considered as completely covered by the contract unit price for Item No. 202-20.10, “Removal of Improvements”, per lump sum.

W. Coordination with Other Projects

**1.0 Description.** The contractor shall coordinate traffic management between this project and any other projects on Rte. 67, and projects which affect Rte. 67, including future projects. 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 Coordination.** The Contractor shall coordinate all limits of the project with the Missouri Department of Transportation and the St. Louis County Transportation & Public Works related to the following projects:

- Pavement resurfacing, signal replacements, guardrail updates, and upgrades to pedestrian facilities from Rte. AC to Rte. 367. (Job No. J6P3623)
- Local LPA Projects (Washington St., New Halls Ferry Rd.)

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, City of Hazelwood, City of Florissant, 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.

**3.0 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 contractor.

**4.0 Basis of Payment.** No direct payment will be made to the contractor to recover the cost of the equipment, labor, materials, or time required to for this coordination with other projects.

X. Great Rivers Greenway Trail Requirements

**1.0 Description.** This provision contains general construction requirements for this project to protect the Great Rivers Greenway Trail under Route 67 near Patterson Road.

**2.0 Construction Requirements.** Provisions shall be made to prevent damage to the asphaltic concrete trail surface and signage. Any damage sustained to the asphaltic concrete trail surface or signage as a result of the contractor's operation shall be the responsibility of the contractor. All costs of repair shall be determined by the trail operator, owner and as approved by the engineer.

**2.1** A detour has been provided via St. Ferdinand Steet when the trail needs to be closed due to construction overhead.

**3.0 Basis of Payment.** There will be no direct payment for compliance with this provision.

Y. MoDOT ITS Assets Relocation

**1.0 Description.** This work consist of relocating existing MoDOT Intelligent Transportation System (ITS) facilities (conduit, cable, and/or pull boxes) that may be in conflict with this project construction sections as noted in the plans.

**2.0 Materials.** The materials used for relocating MoDOT ITS facilities shall be per MoDOT Approved Product List (APL) and meet all MoDOT Specifications. If the material is not in the APL, the contractor shall submit material specification documents to the Engineer and the MoDOT ITS group (via an email in advance to [SLITS@modot.mo.gov](mailto:SLITS@modot.mo.gov)) for review and approval.

**3.0 Construction Requirements.** The Contractor shall be aware there are numerous utilities present along the route in this contract. Utility locates were not performed during the design phase of the project; therefore, the extent of conflicts with utilities are unknown.

**3.1** The Contractor shall submit a proposal to MoDOT ITS staff for review and approval on how they are planning to temporarily detach the existing ITS conduit and fiber optic cables off of Route 67 bridge (Bridge #A1072). The contractor shall be aware there are numerous utilities present along the route in this contract. Utility locates were not performed during the design phase of the project; therefore, the extent of conflicts with utilities are unknown.

**3.2** The contractor shall exercise reasonable care relocating MoDOT ITS Assets. Damage to any MoDOT facilities within the area of work caused by the contractor will be deemed by the Engineer as either "non-emergency" or "emergency" upon notification of the damages. Repair to damages will be performed as follows:

- a) Non-Emergency: Contractor will have 4 hours to propose a repair plan to the Engineer for a complete repair within 3 business days.
- b) Emergency: Upon notification of the damage, Contractor must immediately submit a repair plan to the Engineer which will take no more than 4 hours to respond on-site and complete repairs within 48 hours of notification of damage.
- c) In either case, if the proposed plan is unacceptable for any reason to MoDOT, repairs will be made by MoDOT with all costs billed to the Contractor.

**3.3** The ITS In-Ground Facilities located within the project limits are a crucial part of the traffic operation system for this area. It is imperative that the downtime be kept to a minimum when replacing, removing, or modifying any existing ITS In-Ground Facilities.

**3.4** Prior to any in-ground work, the Contractor shall request for utility locates by contacting Missouri One Call (1-800 DIG-RITE or mo1call.com) for any in-ground installation locations as per plans. If there are any conflicts with MoDOT ITS Assets, the Contractor is responsible for relocation to the satisfaction of the Engineer prior to any in-ground work.

**3.5** In the case of a conduit conflict, the Contractor shall trench an area beyond the in-ground work limits, install one or two conduits (must be the same quality as the existing conduit) using Split Duct Method, relocate the existing cables into the new conduit, and seal the conduit joints per manufacturer specifications.

**3.5.1** For conduit mounted to bridge barrier, the Contractor shall de-attach the conduit/fiber, mount the conduit/fiber temporarily to wooden poles and re-attach the conduit/fiber back to the new bridge barrier.

**3.6** The Contractor shall coordinate this work with the MoDOT ITS group and have the Engineer's approval prior to performing this task.

**3.7** The contractor shall perform a fiber testing (see below requirements) before and after relocating MoDOT fiber cables at the nearest Node Cabinet at each site as shown on the plans and submit that report to the SLITS Group for review and approval.

**3.7.01 Test Procedure.** For each fiber link, follow this procedure:

- (a) If the link includes fiber installed by others, use an optical loss test set to measure and record the optical loss over that portion of the link before it is spliced to new fiber.
- (b) Calculate the maximum allowable loss for the completed link, both at 1310 nm and at 1550 nm. Use the following formula:

$$\begin{aligned} \text{Maximum link loss} = & \text{Measured loss over portion installed by others} \\ & + (\text{Fiber length in km}) \times (0.35 \text{ for } 1310 \text{ nm and } 0.25 \text{ for } 1550 \text{ nm}) \\ & + (\text{Number of fusion splices}) \times (0.05) \\ & + (\text{Number of mechanical splices [for temp. connection]}) \times (0.3) \\ & + (\text{Number of connections}) \times (0.5) \end{aligned}$$

Provide this calculation to the engineer along with the test results.

- (c) Calibrate an optical loss test set and provide evidence satisfactory to the engineer that the set produces accurate results at both wavelengths. This can be a demonstration that the set correctly measures the loss of a test fiber whose loss is known.
- (d) Use the test set to measure the loss of the link under test. Record the result at both 1310 nm and 1550 nm. Arrange for the engineer or his representative to witness these tests.
- (e) If the measured loss exceeds the calculated maximum, use an optical time domain reflectometer and other test equipment to troubleshoot the link. Take whatever corrective

action is required, including cable replacement, to achieve a loss less than the calculated maximum.

**3.7.02 Test Result Documentation.** Prepare a diagram showing all of the links tested in this project. For the portions installed in this project, show the equipment cabinets, splices, and pigtails. On each line representing a link, show the maximum allowable loss and the actual loss. The actual loss shall be the one measured after all corrective actions have been taken. Submit 5 copies of this diagram to the engineer, along with the calculations for the maximum allowable loss. Submit the diagrams and calculations in an electronic format acceptable to the engineer.

**3.7.03 Documentation.** Provide the engineer mark-ups of the plans, neat and legible, illustrating as-built versions of the splice and connection diagrams that are contained in the plans.

**3.7.04 Certifications.** The fiber optic cable shall be factory certified to meet the requirements in this specification. In addition, the manufacturer shall certify that the fiber optic cable has a life expectancy of 20 years.

**3.8** The Contractor shall trench an area beyond the in-ground work limits, install one or two conduits (must be the same quality as the existing conduit) using Split Duct Method, relocate the existing cables into the new conduit, and seal the conduit joints per manufacturer specifications.

**3.9** Upon completion of this work, the Contractor shall contact the MoDOT ITS group (via email at [slits@modot.mo.gov](mailto:slits@modot.mo.gov) to verify that all existing MoDOT ITS devices are online and request inspection of this work. Acceptance of this work shall be the sole judgment of the Engineer and the MoDOT ITS group's engineer.

**3.10** The contractor shall restore those areas disturbed by this work or installation according to specifications herein.

**Basis of Payment.** Payment for "MoDOT ITS Assets Relocation" shall be paid as Linear Feet and shall include the trenching, conduit installation, conduit coupling, pull boxes, sealing materials, cable relocation, needed fiber testing, restoration of all disturbed area, all labor and work incidental thereto, and shall be considered to be completely covered by the contract unit price for the following pay item:

| Item No.  | Unit        | Description                 |
|-----------|-------------|-----------------------------|
| 910-99.03 | Linear Feet | MoDOT ITS Assets Relocation |

Z. Coordination with ITS Staff and Utility Locates

**1.0 Description.** Any work that will impact the existing communications network must be coordinated with the Commission's St. Louis District ITS staff. This includes but not limited to removal and replacement of any existing communications equipment, adding new devices and changes to power sources or disconnects. Minor modifications to the existing communications network can have significant impacts on the system and operation of other ITS and traffic signal systems.

**1.1** MoDOT is a member of MO-One-Call System. Prior to any excavation or work within MoDOT Right-Of-way, the contractor must contact MO-One Call at 1-800-DIG-RITE and request for Utility

Locates within noted project limits. If the scope of work contains modification, addition and/or expansion of existing underground MoDOT ITS, lighting, or signal facilities, the contractor must notify the MoDOT Utilities Locate staff prior to any work, in order for MoDOT to update MoDOT utility location records with Missouri One Call.

**2.0 Contact.** The contractor shall notify the ITS group via an email to [SLITS@modot.mo.gov](mailto:SLITS@modot.mo.gov) at least 2 days before any work that may impact the existing network communications. The contractor shall include the Job#, location and brief scope of work in the email's subject line. The engineer shall be notified prior to making contact with ITS staff. For MoDOT Utility location updates, the contractor must contact MoDOT TMC at 314-275-1500 and ask for Utility Locate Section at least seven calendar days before performing any work.

**3.0** The ITS and network devices located within the project limits are a crucial part of the traffic operation system for this area. It is imperative that the downtime be kept to a minimum when adding, removing, or modifying any existing ITS and network devices. This may require the contractor to perform work that will affect existing network devices during nighttime and/or weekend hours, at the discretion of the Engineer. Allowable timeframes for this work will be subject to the need for ITS devices in the area to be used to manage other traffic impacting work zones.

**4.0 Basis of Payment.** No direct payment shall be made for compliance with this provision.

AA. MoDOT ITS Equipment within Project Limits

**1.0 Description.** MoDOT owned fiber optic cable and conduit, critical MoDOT power supplies and power cables, and pull boxes for fiber and power cabling and other above and underground ITS (Intelligent Transportation System) facilities are present within the limits of this project. Damage or interruption of these items can cause extensive outages to the MoDOT network.

**2.0 Construction Requirements.** The contractor shall exercise reasonable care while completing work near these facilities, and shall take steps necessary to protect these facilities from damage for all items that are not specifically identified as being removed and/or relocated in the plans. Should any of the existing wiring or conduit be damaged by the contractor, it shall be replaced at the contractor's expense and the system in full operation within 4 hours of when the damage occurred. If it is mutually agreed upon between the Commission and the Contractor that the repairs will require more than 4 hours to complete, a mutually agreed upon time for repairs to be complete will be determined.

**2.1** The contractor shall not modify any existing network or electrical connections within equipment cabinets, unless coordinated with MoDOT ITS staff. Existing connections include, but are not limited to, fiber jumpers, CAT5(e) cables, power supplies, and power strips. The connection to specific fiber and copper ports on network equipment shall also not be modified, unless coordinated with MoDOT ITS staff, as the network equipment has been configured specifically for each equipment cabinet. Significant network outages and unnecessary troubleshooting to investigate outages can occur, even with minor changes to existing connections within the cabinet.

**3.0 Liquidated Damages.** In the event of damage, if the system is not repaired and in full operation within 4 hours of the damage occurring, or within the timeframe agreed upon, the

contractor will be charged with a liquidated damage specified in the amount of \$100.00 per hour for each full hour that the system is not fully operational. This damage will be assessed independently of the liquidated damages specified elsewhere in the contract.

**3.1** The MoDOT Engineer will also have the option of issuing a work order for MoDOT's on-call ITS Maintenance contractor to make repairs, if it is the Engineer's opinion that the contractor creating the damage will not be able to make repairs in a timely manner. Contractor's reimbursement for MoDOT expense for this option shall be in addition to the liquidated damages.

**4.0 Basis of Payment.** No direct payment shall be made for compliance with this provision.

BB. 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.

CC. Removal of Unhoused Encampment under Bridges

**1.0 Description.** This work pertains to the removal and the maintenance thereof of encampment of the unhoused currently located under Bridge A1072.



**2.0 Coordination.** Three (3) weeks prior to the planned start date for work on Bridge A1072, the Contractor shall contact the Resident Engineer and coordinate the efforts of removing the various items under the bridge. An initial, onsite meeting to discuss the extent and process for removals will be held with MoDOT Area Team members, members from MoDOT Environmental, the Resident Engineer and their assigned personnel, and the Contractor and its assigned personnel. The City of Florissant will also be invited to the meeting.

**2.1** The removals shall be coordinated to be in close proximity to the Contractor's start date so that construction fencing can be installed (by Contractor) and when construction activity and contractor presence will be regular.

**2.2** The initial removal of the items shall be completed by MoDOT forces. The Contractor shall be present for a pre-final walkthrough of the area after removals have occurred to confirm / accept that the extent of the removals allows them the access and working room necessary for them to safely complete their construction activities.

**2.3** Upon Contractor acceptance of the removal, the responsibility of maintaining the jobsite from similar encampments will be the Contractors.

**3.0 Basis of Payment.** No direct payment will be made to the Contractor to recover costs of the equipment, labor, materials, or time required for this coordination or maintenance of the above removals.

DD. Slurry and Residue Produced During Surface Treatment if PCCP and Bridge Decks

**1.0 Description.** This work covers the requirements for controlling residue or slurry produced by milling, grinding, planing, grooving or other methods of surface treatments on new or existing PCCP and bridge decks in addition to Section 622.

**2.0 Construction Requirements.** The following shall be considered the minimum requirements for performing this work within the project limits.

**2.1** The contractor shall submit to the Engineer for approval in writing prior to the pre-construction meeting, the best management practices (BMP's) to be used to protect the environment, including the method of disposal of the residue whether on right of way or off-site.

**2.2** When slurry is dispersed on the right of way, BMP's shall be installed to keep slurry or residue from entering paved ditches or structures discharging within the areas restricted by Section 622.303.8.6, from entering any waterways or from leaving the right of way.

**2.3** Upon approval of the contractor's BMP and residue disposal plan and prior to the contractor beginning surface treatment operations, the Engineer will identify slurry or residue "no discharge zones".

**2.4** Operations may be suspended by the Engineer during periods of rainfall or during freezing temperatures.

**3.0 Basis of Payment.** No direct payment for slurry or residue control requirements for BMP's will be made. Compliance with this specification along with the cost of all materials, labor and

equipment necessary for the surface treatment work shall be included in and completely covered by the unit price bid for each of the items of work for surface treatment included in contract.

EE. Overhead Signs Adjustment

**1.0 Description.** This work shall consist of temporarily covering panels on existing sign trusses and any additional signs listed in the contract along with installing 'Closed' sign plaques on the existing signs as well. This work will also include temporarily removing and replacing existing panels from sign trusses as shown in the plans for traffic control staging. Uncovering of the signs and the removing of the 'Closed' plaques shall be included within the cost of this pay item. The contractor shall uncover signs and remove 'Closed' plaques once the traffic control stage is completed for each roadway/bridge which has signs to be covered and plaques to be installed. The contractor shall place existing panels back to their original location once the traffic control stage is complete.

**2.0 Basis of Payment.** The accepted quantity of covering/uncovering existing signs, temporarily removing and replacing existing sign panels, and installing/removing 'Closed' plaques on existing signs will be paid at the contract unit price for the pay item included in the contract. All labor, equipment and material cost required to fulfill this requirement shall be included in the unit price for the following pay item:

| Item No.  | Type | Description                           |
|-----------|------|---------------------------------------|
| 903-99.02 | Each | Modify Existing Overhead Sign Trusses |