

Job No.: J8S0745

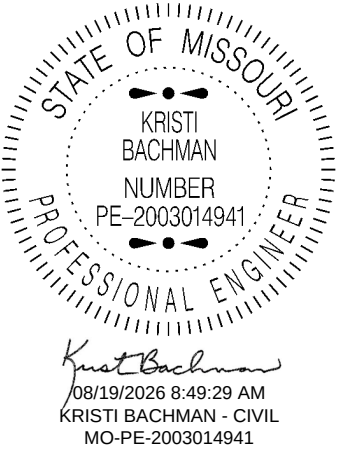
Route: D

County: Greene

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

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|                                                                                     |                                                                                                                                       |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
|  | <b>MISSOURI HIGHWAYS AND<br/>TRANSPORTATION COMMISSION</b><br>105 W. CAPITOL AVE.<br>JEFFERSON CITY, MO 65102<br>Phone 1-888-275-6636 |
|                                                                                     | If a seal is present on this sheet, JSP's<br>have been electronically sealed and<br>dated.                                            |
|                                                                                     | JOB NUMBER: J8S0745<br>GREENE COUNTY, MO<br>DATE PREPARED: 06/08/2026                                                                 |
|                                                                                     | ADDENDUM DATE:                                                                                                                        |

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

JOB  
SPECIAL PROVISION

A. General - Federal JSP-09-02M

**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 2026 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- 13-01E

**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.

Job No.: J8S0745  
Route: D  
County: Greene

Notice to Proceed: October 22, 2026  
Contract Completion Date: June 30, 2028

**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 | Calendar Days | Daily Road User Cost |
|---------|---------------|----------------------|
| J8S0745 | N/A           | \$7,600              |
| J8S3133 | N/A           | \$7,600              |
| J8S3153 | N/A           | \$7,600              |

**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 **\$2,000** 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. 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.

#### **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:

| <b>When<br/>Independence<br/>Day falls on:</b> | <b>The Holiday<br/>is Observed<br/>on:</b> | <b>Halt Lane Closures<br/>beginning at:</b> | <b>Allow Lane Closures to<br/>resume at:</b> |
|------------------------------------------------|--------------------------------------------|---------------------------------------------|----------------------------------------------|
| 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, 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** Any work requiring a reduction in the number of through lanes of traffic shall be completed during nighttime hours. Nighttime hours shall be considered to be 8:00 p.m. to 6:00 a.m. for this project.

#### **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.

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

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

Springfield Resident Engineer: Brad Gripka 417-895-6720 (Office) or 417-529-2469 (Cell)

**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: (417) 895-6868                     |
| Greene County Sheriff's Department: (417) 868-4040          |
| City of Springfield Police Department: (417) 864-1810       |
| City of Springfield Fire Department: (417) 874-2300         |
| MoDOT Customer Service (417) 895-7600                       |
| Emergency Only Numbers                                      |
| 911                                                         |
| (*55 cell phone – Missouri Highway Patrol)                  |
| (417-864-1160 cell – MoDOT Incident Management Coordinator) |

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

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

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

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

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

Job No.: J8S0745  
Route: D  
County: Greene

Kristi Bachman, Project Contact  
Southwest District  
3025 E Kearney St.  
Springfield, MO 65803

Telephone Number: 417-834-7171  
Email: [kristi.bachman@modot.mo.gov](mailto:kristi.bachman@modot.mo.gov)

**1.1** All questions concerning the bid document preparation can be directed to the Central Office – Design as listed below.

Telephone Number: (573) 751-2876  
Email: [BCS@modot.mo.gov](mailto:BCS@modot.mo.gov)

**2.0** Upon award and execution of the contract, the successful bidder/contractor shall forward all questions and coordinate the work with the engineer listed below:

Brad Gripka, Resident Engineer  
Southwest District  
2459 North Mayfair  
Springfield, MO 65803

Office Telephone Number: 417-895-6720  
Mobile Telephone Number: 417-834-6976  
Email: [donald.gripka@modot.mo.gov](mailto:donald.gripka@modot.mo.gov)

F. Supplemental Revisions JSP-18-01KK

- 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 or Steel Products.**

The contractor's attention is directed to Title 23 CFR 635.410 *Buy America Requirements*. Where articles, materials or supplies that consist wholly or predominantly of iron or steel or a combination of both 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. Predominantly of iron or steel or a combination of both means that the cost of the iron and steel content exceeds 50 percent of the total cost of all its components. 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** 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.

**106.9.1.2** "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.

**106.9.1.3** 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.

**106.9.1.3.1** 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 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.

**106.9.1.3.2** 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.

**106.9.1.3.3** 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.

**106.9.1.4** 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.

**106.9.2 Buy America Requirements for Construction Materials other than iron or steel products.**

Construction materials mean 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

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

Manufactured products mean articles, materials or supplies that have been processed into a specific form and shape, or combined with other articles, materials or supplies to create a product with different properties than the individual articles, materials or supplies. If an item is classified as an iron or steel product, an excluded material, or other product category as specified by law or in 2 CFR part 184, then it is not a manufactured product. However, an article, material or supply classified as a manufactured product may include components that are iron or steel products, excluded materials, or other product categories as specified by law or in 2 CFR part 184. Mixtures

of excluded materials delivered to a work site without final form for incorporation into a project are not a manufactured product.

**106.9.3.1** Produced in the United States, in the case of manufactured products, means:

(A) For projects obligated on or after October 1, 2025, the product was manufactured in the United States; and

(B) For projects obligated on or after October 1, 2026, the product was manufactured in the United States and the cost of the components of the manufactured product that are mined, produced, or manufactured in the United States is greater than 55 percent of the total cost of all components of the manufactured product.

**106.9.3.2** (i) With respect to precast concrete products that are classified as manufactured products, components of precast concrete products that consist wholly or predominantly of iron or steel or a combination of both shall meet the requirements of paragraph (b) of this section. The cost of such components shall be included in the applicable calculation for purposes of determining whether the precast concrete product is produced in the United States.

(ii) With respect to intelligent transportation systems and other electronic hardware systems that are installed in the highway right of way or other real property and classified as manufactured products, the cabinets or other enclosures of such systems that consist wholly or predominantly of iron or steel or a combination of both shall meet the requirements of paragraph (b) of this section. The cost of cabinets or other enclosures shall be included in the applicable calculation for purposes of determining whether systems referred to in the preceding sentence are produced in the United States.

**106.9.4 Waiver for De Minimis Costs for Manufactured and Construction Materials other than iron or steel products.**

“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.

- 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 dynamic 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.

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

**15.0 Bidder's List Quote Summary.** MoDOT is a recipient of federal funds and is required by 49 CFR 26.11 to provide data about its DBE program. All bidders who seek to work on federally assisted contracts must submit data about all DBE and non-DBEs in accordance with Sec 102.7.9. MoDOT will not compare the submitted Bidder's List Quote Summary to any other documents or submittals, pre or post award. All information will be used by MoDOT in accordance with 49 CFR 26.11 for reporting to USDOT and to aid in overall DBE goal setting.

- **Add Sec 102.7.9 to include the following:**

**102.7.9 Bidder's List Quote Summary.** Each bidder shall submit with each bid a summary of all subcontractors, material suppliers, and service providers (e.g. hauling) considered on federally funded projects pursuant to 49 CFR 26.11. The bidder will provide the firm's name, the corresponding North American Industry Classification System (NAICS) code(s) the firm(s) were considered for, and whether or not they were used in the bid. The information submitted should be the most complete information available at the time of bid. The information shall be disclosed on the Bidder's List Quote Summary form provided in the bidding documents and submitted in accordance with Sec 102.10. Failure to disclose this information may result in a bid being declared irregular.

G. Liquidated Damages Specified

**1.0 Description.** If any lanes of Route D (Sunshine St.) are not open to traffic by 6:00 a.m. each day following a nighttime lane closure, the Commission, the traveling public, and state and local police and governmental authorities will be damaged in various ways, including but not limited to, increased construction administration cost, potential liability, traffic and traffic flow regulation cost, traffic congestion and motorist delay, with its resulting cost to the traveling public. These damages are not reasonably capable of being computed or quantified. Therefore, the contractor will be charged with liquidated damages specified according to the following schedule.

- (a) If any lane or lanes of Route D (Sunshine St.) are closed for any time between 6:00 a.m. to 7:00 a.m., the contractor shall be charged in the amount of \$800 for that hour or any fraction of that hour.
- (b) If any lane or lanes of Route D (Sunshine St.) are closed for any time between 7:00 a.m. to 8:00 a.m., the contractor shall be charged in the amount of \$1,200 for that hour or any fraction of that hour.
- (c) If any lane or lanes of Route D (Sunshine St.) are closed for any time between 8:00 a.m. to 9:00 a.m., the contractor shall be charged in the amount of \$1,000 for that hour or any fraction of that hour.
- (d) If any lane or lanes of Route D (Sunshine St.) are closed for any time between 9:00 a.m. to 10:00 a.m., the contractor shall be charged in the amount of \$1,400 for that hour or any fraction of that hour.

- (e) If any lane or lanes of Route D (Sunshine St.) are closed for any time after 10:00 a.m., the contractor shall be charged in the amount of \$1,400 for the remaining day not to exceed \$5,000 for each full day or fraction of a day that all lanes are not open to traffic.

**1.1** All liquidated damages specified are 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 excess closure time.

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

H. Quality Management NJSP-15-22

**1.0 Quality Management.** The contractor shall provide Quality Management as specified herein to ensure the project work and materials meets or exceeds all contract requirements.

**1.1** The contractor shall provide Quality Control (QC) of the work and material, as specified herein, to ensure all work and material is in compliance with contract requirements. QC staff shall perform and document all inspection and testing. The QC inspectors and testers may be employed by the contractor, sub-contractor, or a qualified professional service provided by the contractor.

**1.2** The engineer will provide Quality Assurance (QA) inspection. The role of QA is to verify the performance of QC and provide confidence that the product will satisfy given requirements for quality.

**1.3** The contractor shall designate a person to serve as the project Quality Manager (QM). The QM shall be knowledgeable of standard testing and inspection procedures for highway and bridge construction, including a thorough understanding of the Missouri Standard Specifications. The QM shall be responsible for the implementation and execution of the Quality Management Plan and shall oversee all QC responsibilities, including all sub-contract work. The QM shall be the primary point of contact for all quality related issues and responsibilities, and shall ensure qualified QC technicians and inspectors are assigned to all work activities. The QM should be separate from the manager of the work activities to effectively manage a QC program.

**1.4** Any QC personnel determined in sole discretion of the engineer to be incompetent, derelict in their duties, or dishonest, shall at a minimum be removed from the project. Further investigation will follow with a stop work notification to be issued until the contractor submits a corrective action report that meets the approval of the engineer.

**2.0 Quality Management Plan.** The contractor shall develop, implement and maintain a Quality Management Plan (QMP) that will ensure the project quality meets or exceeds all contract requirements, and provides a record for acceptance of the work and material. A sample QMP, which shows minimum requirements, is provided on the MoDOT website at: [www.modot.org/quality](http://www.modot.org/quality).

**2.1** The QMP shall address all QC inspection and testing requirements of the work as described herein. A draft QMP shall be submitted to the Resident Engineer for review at least two weeks prior to the pre-construction conference. An approved QMP is required at least two weeks prior

to the start of work, unless otherwise allowed by the engineer. Physical work on the project shall not begin prior to approval of the QMP by the engineer.

**2.2** The approved QMP shall be considered a contract document and any revisions to the QMP will require approval from the engineer.

**2.3** The following items shall be included in the Quality Management Plan:

- a) Organizational structure of the contractor's project management, production staff, and QC staff, specific to this project.
- b) Name, qualifications and job duties of the Quality Manager.
- c) A list of all certified QC testers who will perform QC duties on the project, including sub-contract work, and the tests in which they are certified.
- d) A list of all QC inspectors who will perform QC inspection duties on the project, including sub-contract work, and the areas of inspection that they will be assigned.
- e) A procedure for verifying documentation is accurate and complete as outlined in Section 3.
- f) A procedure describing QC Inspections as outlined in Section 4.
- g) A procedure describing QC Testing, as outlined in Section 5, including a job specific Inspection and Test Plan (ITP).
- h) A procedure describing Material Receiving as outlined in Section 6.
- i) A list of Hold Points that are not included in the checklist forms, as outlined in Section 8.
- j) A procedure for documenting and resolving Non-Conforming work as outlined in Section 9.
- k) A procedure for tracking and documenting revisions to the QMP.
- l) A list of any approved changes to the Standard Specifications or ITP, including a reference to the corresponding change order.
- m) Format for the Weekly Schedule and Work Plans as outlined in Section 10, including a list of activities that will require pre-activity meetings.

**3.0 Project Documentation.** The contractor shall establish a Document Control Procedure for producing and uploading the required Quality Management documents to a MoDOT-provided server. The document management software used by MoDOT is Microsoft SharePoint®. Contractors do not need to purchase Microsoft SharePoint®, however, it is recommended that new users acquire some basic training to better understand how to use this software. MoDOT does not provide the software training, but there are several online vendors who do. Contractors are required to use Microsoft Excel® and Microsoft Word® with some documents.



**3.1** The contractor shall utilize the file structure and file naming convention provided by MoDOT. A sample file structure is available on the MoDOT website.

**3.2** Documents (standard forms, reports, and checklists) referenced throughout this provision are considered the minimum documentation required. They shall be obtained from MoDOT at the following web address: [www.modot.org/quality](http://www.modot.org/quality). The documents provided by MoDOT are required to be used in the original format, unless otherwise approved by the engineer. Any alteration to these forms shall be approved by the engineer.

**3.3** Timely submittal of the required documents to the MoDOT document storage location is essential to ensure payment can be processed for the completed work. Submittal of the documents is required within 12 hours of the work shift that the work was performed, or on a document-specific schedule approved by the engineer and included in the QMP.

**3.4** The contractor shall establish a verification procedure that ensures all required documents are submitted to the engineer within the specified time, and prior to the end of each pay period for the work that was completed during that period. Payment will not be made for work that does not include all required documents. Minimum documents that might be required prior to payment include: Test Reports, Inspection Checklists, Materials Receiving Reports, and Daily Inspection Reports.

**3.5** The contractor shall perform an audit at project closeout to ensure the final collection of documents is accurate and complete.

**4.0 Quality Control Inspections.** The QMP shall identify a procedure for performing QC inspections. QC inspections shall be performed for all project activities to ensure the work is in compliance with the contract, plans and specifications.

**4.1** The QM shall identify the QC inspectors assigned to each work activity. The QC inspectors shall inspect the work to ensure the work is completed in accordance with the plans and specifications, and shall document the inspection by completing the required inspection checklists, forms, and reports provided by MoDOT. Depending on the type of work, the checklists may be necessary daily, or they may follow a progressive work process. The frequency of each checklist shall be stated in the QMP. The contractor may propose alternate versions of checklists that are more specific to the work.

**4.2** A Daily Inspection Report (DIR) is required to document pertinent activity on the project each day. This report shall include a detailed diary that describes the work performed as well as observations made by the inspection staff regarding quality control. The report shall include other items such as weather conditions, location of work, installed quantities, tests performed, and a list of all subcontractors that performed work on that date. The report shall include the full name of the responsible person who filled out the report and shall be digitally signed by an authorized contractor representative.

**4.3** External fabrication of materials does not require further QC inspection if the product is currently under MoDOT inspection or an approved QC/QA program. QC inspection and testing required in the production of concrete for the project shall be the responsibility of the contractor.

**4.4** The contractor shall measure, and document on the DIR, the quantity for all items of work that require measurement. Any calculations necessary to support the measurement shall be

included with the documentation. The engineer will verify the measurements prior to final payment.

**5.0 Quality Control Testing.** The QMP shall identify a procedure for QC testing. The contractor shall perform testing of the work at the frequency specified in the Inspection and Test Plan (ITP).

**5.1** MoDOT will provide a standard ITP and the contractor shall modify it to include only the items of work in the contract, including adding any Job Special Provision items. The standard ITP is available on the MoDOT website at [www.modot.org/quality](http://www.modot.org/quality). The contractor shall not change the specifications, testing procedures, or the testing frequencies, from the standard ITP without approval by the engineer and issuance of a change order.

**5.2** Test results shall be recorded on the standard test reports provided by the engineer, or in a format approved by the engineer. Any test data shall be immediately provided to the engineer upon request at any time, including prior to the submission of the test report.

**5.3** The contractor shall ensure that all personnel who perform sampling and/or testing are certified by the MoDOT Technician Certification Program or a certification program that has been approved by MoDOT for the sampling and testing they perform.

**5.4** If necessary, an independent third party will be used to resolve any significant discrepancies between QC and QA test results. All dispute resolution testing shall be performed by a laboratory that is accredited in the AASHTO Accreditation Program in the area of the test performed. The contractor shall be responsible for the cost to employ the third party laboratory if the third party test verifies that the QA test was accurate. The Commission shall be responsible for the cost if the third party test verifies that the QC test was accurate.

**6.0 Material Receiving.** The QMP shall identify a procedure for performing material receiving. Standard material receiving forms will be provided by the engineer.

**6.1** The procedure shall address inspections for all material delivered to the site (excluding testable material such as concrete, asphalt, aggregate, etc.) for general condition of the material at the time it is delivered. The material receiving procedure shall record markings and accompanying documentation indicating the material is MoDOT accepted material (MoDOT-OK Stamp, PAL tags, material certifications, etc.).

**6.2** All required material documentation must be present at the time of delivery. If the material is not MoDOT accepted, the contractor shall notify the engineer immediately and shall not incorporate the material into the work.

**7.0 Quality Assurance.** The engineer will perform Quality Assurance inspection and testing (QA) to verify the performance of QC inspection and testing. The frequency of the QA testing will be as shown in the ITP, but may be more frequent at the discretion of the engineer. The engineer will record the results of the QA testing and inspection and will inform the contractor of any known discrepancies.

**7.1** QA is responsible for verifying the accuracy of the final quantity of all pay items in the contract. This includes taking measurements on items that require measurement and other items that are found to have appreciable errors.

**7.2** QA inspection and test results shall not be used as a substitute for QC inspection and testing.

**7.3** QA will be available for Hold Point inspections at the times planned in the Weekly Schedule. The inspections may be re-scheduled as needed, but a minimum 24-hour advance notification from the contractor is required unless otherwise approved by the engineer.

**8.0 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 the succeeding work depends on a QA review of the preceding work before work can continue.

**8.1** A list of minimum Hold Points will be provided by the engineer and shall be included in the QMP. The engineer may make changes to the Hold Point list at any time.

**8.2** Prior to all Hold Point inspections, QC shall provide the engineer with the Daily Inspection Reports, Inspection Checklists, Test Reports, and Material Receiving Reports for the work performed leading up to the Hold Point. 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.

**9.0 Non-Conformance Reporting.** Non-conformance reports shall be issued by the contractor for work that does not meet the contract requirements. Non-conforming work includes work, testing, materials and processes that do not meet contract requirements. The contractor shall establish a procedure for identifying and resolving non-conforming work as well as tracking the status of the reports.

**9.1** Contractor QC staff or production staff should identify non-conforming work and document the details on the Non-Conformance Report form provided by MoDOT. QA staff may also initiate a non-conformance report.

**9.2** In-progress work that does not meet the contract requirements may not require a non-conformance report if production staff is aware of the issue and corrects the problem during production. QC or QA may issue a non-conformance report for in-progress work when documentation of the deficiency is considered beneficial to the project record.

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

**9.4** For recurring non-conformance work of the same or similar nature, a written Corrective Action Request will be issued by QC or QA. The contractor shall then establish a procedure for tracking the corrective action from issuance of the request to implementation of the solution. Approval from the engineer is required prior to implementation of the proposed corrective action. The contractor shall notify the engineer after the approved corrective action has been implemented.

**10.0 Work Planning and Scheduling.** The contractor shall include Quality Management in all aspects of the work planning and scheduling. This shall include providing a Weekly Schedule, a Work Plan for each work activity, and holding pre-activity meetings for each new activity.

**10.1** A Weekly Schedule shall be provided to the engineer each week that outlines the planned project activities for the following two-week period. This schedule shall include all planned work, identification of all new activities, traffic control events, and requested Hold Point inspections for

the period. Planned quantity of materials, along with delivery dates should also be included in the schedule.

**10.2** A Work Plan shall be submitted to the engineer at least one week prior to the pre-activity meeting. The Work Plan shall include the following: a safety plan, list of materials to be used, work sequence, defined responsibilities for QC testing and inspection personnel, and stages of work that will require Hold Point inspections.

**10.3** A pre-activity meeting is required prior to the start of each new activity. The purpose of this meeting is to discuss details of the Work Plan and schedule, including all safety precautions. Those present at the meeting shall include: the production supervisor for the activity, the Quality Manager, QC inspection and testing staff, and QA. The Quality Manager will review the defined responsibilities for QC testing and inspection personnel and will address any quality issues with the production staff. Attendees may join the meeting in person or by phone or video conference.

**11.0 Basis of Payment.** Payment for all costs associated with developing, implementing and maintaining the Quality Management Plan, providing Quality Control inspection and testing, and all other costs associated with this provision, will be considered included in the unit price of each contract item. No direct pay will be made for this provision.

I. Disposition of Existing Signal, Lighting and Network Equipment

**1.0 Description.** This work shall consist of the disposition of existing signal, lighting, and network equipment as shown on the plans and delivering it to the specified MoDOT maintenance lot.

**2.0 Construction Requirements.** All controllers, cabinets, cabinet equipment, network equipment, DMS equipment, antennas, radios, modems, and other equipment noted in the plans shall be removed by the contractor and delivered to the following location:

Springfield Maintenance Lot  
2455 N. Mayfair  
Springfield, MO 65803

**2.1** The contractor shall notify the Commission's representative 24 hours prior to each delivery by calling the contact listed below.

Joe Dotson, Urban Traffic Supervisor  
Phone: (417) 895-7599 or (417) 733-0664

**2.2** The contractor shall exercise reasonable care in the handling of the equipment during the removal and transportation. Should any of the equipment be damaged by the contractor's negligence, it shall be replaced at the contractor's expense. Delivery shall be within 2 working days of removal. All items returned shall be tagged with the date removed, project number and location/intersection.

**2.3** Equipment shown on the plans for removal not listed in section 2.0 above shall become the property of the contractor and removed from the project.

**3.0 Basis of Payment.** Payment for removal, handling and transportation of all equipment specified will be considered completely covered by the contract unit price for 202-20.10, Removal of Improvements, per lump sum.

J. 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.

K. Access to Commercial Properties

**1.0 Description.** This improvement is in a highly commercial area. While working on and around commercial entrances, the contractor shall make every reasonable effort to minimize any interference to business and to pursue the work diligently. Under no circumstances shall the contractor block ingress/egress to and from businesses during the normal business hours of each business unless approved by the property owner and the engineer.

**1.1** The contractor shall contact each business at least one (1) week in advance to advise them of the work that will take place before working on each business entrance. In some cases where a property has more than one entrance, the property owner may have a preference on whether

to have one entrance closed while it is worked on or whether to have the entrances worked on one-half at a time. The contractor is required to do the work according to each individual property owner's preference. The contractor shall not disturb any existing trees, shrubs, landscaping, small block walls or irrigation lines. The contractor shall be solely responsible for repairing any damage to the property caused by contractor operations.

**2.0 Basis of Payment.** No direct payment will be made to the contractor for all costs incurred with compliance of this provision.

L. Schedule of Signal, Sidewalk, Driveway, ADA Work, and Paving Operations

**1.0 Description.** This work shall consist of scheduling paving work (J80875) after the signal, sidewalk, driveway, and other ADA work is completed.

**2.0 Construction Requirements.** The contractor shall not pave the final lift of any roadway section adjacent to signal, sidewalk, driveway, and other ADA work prior to the signal, sidewalk, driveway, and other ADA work being completed.

**2.1** The contractor will be allowed to do temporary milling/filling as required or as approved by engineer.

**2.2** Before leaving a work area (signal reconstruction, HAWK construction, etc.) to move to another work area, the contractor shall ensure a majority of the work is complete and has been approved by the engineer. The contractor shall install any temporary traffic control, including temporary pavement marking, necessary for the functional operation of these areas.

**3.0 Method of Measurement.** No measurement will be made.

**4.0 Basis of Payment.** No direct payment will be made to comply with this provision. All equipment and labor necessary for the work described will be considered incidental to and completely covered by other pay items provided in the contract.

M. Pavement Edge Treatment for Drop Off Conditions

**1.0 Description.** This work shall consist of providing pavement edge treatment due to construction methods used by the contractor.

**2.0 Construction Requirements.** The contractor shall perform construction operations so there will be no drop off exceeding 2 inches adjacent to traffic. The contractor shall install pavement edge treatment at locations where the drop off is greater than 2 inches adjacent to traffic.

**3.0 Method of Measurement.** No measurement of pavement edge treatment as described above will be made. Treatment of any drop off greater than 2 inches shall be considered incidental to and completely covered by other pay items provided in the contract.

**4.0 Basis of Payment.** No direct payment will be made to comply with this provision.

N. Contractor Furnished Surveying and Staking – SW

In addition to the requirements of Section 627 of the Missouri Standard Specifications for Highway Construction, the following shall apply:

**1.0 Description.** The contractor shall be responsible for all layout required on the project. This responsibility shall include, but not be limited to the following: Construction signing, transition milling, pavement marking, loop detectors, etc.

**1.1** The above list is not all inclusive. The contractor shall have the primary responsibility for these operations. The contractor shall provide the Resident Engineer with a staking plan layout for approval prior to the installation of signs. The RE will also provide assistance during this layout provided a request is submitted to the RE or Construction Project Manager 48 hours in advance. This will ensure that all permanently mounted traffic control devices remain consistent with District policy and avoid re-staking. If the contractor installs any signs without engineer approval, all costs associated with re-staking and/or relocation will be at the contractor's expense.

**1.2** The intent of this provision is to increase the quality of our work zones and minimize negative impacts to the contractor's schedule that can result from delays in staking.

**1.3** Any adjustments to the plan quantities or line numbers established in the contract shall be approved by the Engineer.

**2.0 Basis of Payment.** No direct payment will be made to cover the costs associated with these additional requirements. All costs will be considered completely covered by the unit bid price submitted for Contractor Furnished Surveying and Staking.

O. Shared Traffic Control Devices

**1.0 Description.** This work shall consist of sharing specific traffic control devices between projects that are let in combination with this project. Project JSR0127 will have its own traffic control devices and will not be sharing with any other project.

**2.0 Construction Requirements.** The following items will be paid for on project J8S0745 and shall be used by the contractor on projects J8S3133, J8S3153, and J8S0745. The contractor shall coordinate the use of these traffic control devices for all projects listed above without any additional compensation.

- Road Work Next XX Miles Signs
- End Road Work Signs
- Point of Presence Signs
- Rate Our Work Zone Signs
- Work Zone No Phone Zone Signs
- Advanced Warning Rail System

**2.1** Road Work Ahead Signs at side streets, project beginning, and project ending will be provided and paid for under project J8S0745. Road Work Ahead Signs shown in other traffic control packages as shown on the plans for the other projects listed will be provided and paid for under those projects.

**3.0 Method of Measurement.** No measurement will be made for sharing traffic control signs between projects.

**4.0 Basis of Payment.** No direct payment will be made to comply with this provision. All equipment and labor necessary for the work described will be considered incidental to and completely covered by other pay items provided in the contract.

P. Cooperation Between Contractors – SW

**1.0 Description.** The contractor shall be aware that other contracts will be administered in the vicinity and timeframe as this contract.

**1.1** Job Numbers J8S3166, J8S3167, J8S3224, J8S3171, J8P3192 and J8P3144 provides for resurfacing, ADA, and safety and operational improvements on Interstate Loop 44 (Chestnut Expressway) from I-44 to Route 65 in Springfield, and at various other locations in Greene and Christian counties. Construction is scheduled for 2024-2026.

**1.2** Job Numbers J8I3225, JSU0076, J8I3044C, JST0088, and JSU0114 are resurfacing, pavement rebuild and widening, and sound abatement projects let in combination on I-44 in Springfield, MO. Construction is scheduled for 2025-2027.

**2.0 Requirements.** The contractor shall coordinate work so as not to interfere with or hinder the progress or completion of the work being performed by the other contractor. The contractor shall also coordinate work to minimize impacts to the traveling public between the work zones.

**2.1** The contractor will not be granted additional time due to conflicts with other contractors, unless approved by the engineer.

**3.0 Basis of Payment.** No direct payment or additional time 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.

Q. Truck Mounted Attenuator (TMA) for Stationary Activities JSP-23-04

**1.0 Description.** Provide and maintain Truck Mounted Attenuators (TMA) in accordance with Sec 612 and as specified herein.

**2.0 Construction Requirements.** Truck Mounted Attenuators (TMA) shall be used for the work activities indicated in the plans or specified herein.

**2.1 Lane Closures on 4-Lane Highways:**

- (a) Any left, right, or center lane closures for any 4-lane highway affected by this project.

**2.2 Traffic Signal Equipment Relocation**

- (a) Any lane closure required for any traffic signal relocation and installation.

**2.3 Pavement Marking Installation**



(a) Any lane closure required to install final pavement marking.

**3.0 Method of Measurement.** No measurement will be made for Truck Mounted Attenuators (TMA).

**4.0 Basis of Payment.** Delete Sec 612.5.1 and substitute with the following:

**612.5.1** No payment will be made for truck mounted attenuators (TMAs) used in mobile operations or for any TMAs designated as optional.

**612.5.1.1** Payment for TMAs required for stationary work activities will be paid for at the contract unit bid price for Item 612-30.01, Truck Mounted Attenuator (TMA), per lump sum. The lump sum payment includes all work activities that require a TMA, regardless of the number of deployments, relocations, or length of time utilized. No payment will be made for repair or replacement of damaged TMAs.

R. Special Provisions for Protection of BNSF Railway Company Interests

To Report an Emergency on the railroad call: (800) 832-5452

Scott County Rte. Y US DOT# 664251D MP 242.75 BNSF Cuba Sub in Springfield, MO.

**Current FRA data shows 0 day trains, 0 night trains and 0 passenger trains. With one train per week.**

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

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

**1.2** The authorized representative of the Missouri Highways and Transportation Commission, herein called "Engineer", shall have authority over all other matters as prescribed herein and in the project specifications.

**2.0 Contractor's indemnity Obligations to the Railroad.**

**2.1** The term "contractor" as used in this special provision includes any and all subcontractors. The contractor shall indemnify, defend and hold harmless the Railroad from and against any and all loss, damage, claims, demands, causes of action, costs and expenses of whatsoever nature arising out of injury to or death of persons whomsoever, or out of damage to or destruction of property whatsoever, including, without limitation, damage to fiber optic, communication and other cable lines and systems, where such injury, death, damage or destruction results from any cause arising out of work performed by the contractor pursuant to the agreement between Railroad and the Commission for the project, and shall also release the Railroad from and shall waive any claims for injury or damage to equipment or other property, which may result from the construction, maintenance and operation of railroad tracks, wire lines, fiber optic cable, pipe lines and other facilities on said right of way of the Railroad by the contractor. **THE LIABILITY ASSUMED BY THE CONTRACTOR WILL NOT BE AFFECTED BY THE FACT, IF IT IS A FACT, THAT THE DAMAGE, DESTRUCTION, INJURY, DEATH, CAUSE OF ACTION OR CLAIM WAS OCCASIONED BY OR CONTRIBUTED TO BY THE NEGLIGENCE OF THE RAILROAD, THE RAILROAD'S AGENTS, SERVANTS, EMPLOYEES**

**OR OTHERWISE, EXCEPT TO THE EXTENT THAT SUCH CLAIMS ARE PROVEN BY ANY CLAIMANT TO HAVE BEEN PROXIMATELY CAUSED BY THE INTENTIONAL MISCONDUCT OR SOLE OR GROSS NEGLIGENCE OF THE RAILROAD.** The contractor's indemnity shall include loss of profits or revenue arising from damage or destruction to fiber optic, communication and other cable lines and systems.

**2.2** In addition to the indemnity obligations contained in the preceding paragraph, the contractor shall indemnify, defend and hold harmless the Railroad from any claims, expenses, costs, actions, demands, losses, fines, penalties, and fees, of whatsoever nature arising from, related to or connected, in whole or in part, with the following:

(a) The removal of the contractor's agents, servants, employees or invitees from the Railroad's property for safety reasons.

(b) Contractor's compliance or failure to comply with the provision of applicable law in connection with the performance of contractor's work.

### **3.0 Notice of Starting Work.**

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

(a) The contractor shall be required to apply for, execute and comply with all provisions of a permit obtained by accessing the following link: <http://bnsf.railpermitting.com>

**3.2** The Railroad's written authorization to proceed with the work, with a copy to the Engineer, will include the names, addresses and telephone numbers of the Railroad's representatives who are to be notified as hereinafter required. Where more than one representative is designated, the area of responsibility of each representative shall be specified.

### **4.0 Interference with Railroad Operations.**

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

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

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

or provide such provisions as deem necessary. In any event, such provisions shall be at the contractor's expense and without cost to the Railroad or the Commission.

**4.4** The contractor shall be responsible for any damage to the Railroad as a result of work on the project, which shall include but not be limited to interference with the normal movement of trains caused exclusively by the work performed by the contractor. The contractor shall be responsible for damages for the Railroad's train delays that are caused exclusively by the contractor. The Railroad agrees not to perform any act to unnecessarily cause any train delay. The damages for train delays per freight hour will be billed at an average rate per hour as determined from the Railroad's records. These records shall be provided by the Railroad, upon request, to the Commission or the Commission's contractor.

## **5.0 Track Clearances.**

**5.1** The minimum track clearances to be maintained by the contractor during construction are shown on the project plans. However, before undertaking any work within Railroad's right of way, or before placing any obstruction over any track, the contractor shall:

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

**5.2** The contractor shall fully comply with any horizontal and vertical clearance requirements imposed by Missouri state statutes and regulations and Federal statutes and regulations regarding the placement of structures or equipment near or over railroad tracks.

## **6.0 Construction Procedures.**

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

- (a) Subject to the inspection and review of the Railroad.
- (b) In accordance with the Railroad's written outline of specific conditions.
- (c) In accordance with this special provision.
- (d) Care shall be taken to avoid damage to concrete crossing panels. Milling within two (2) feet of concrete crossing planks shall be done manually or using specific machinery for fine mill work such as a milling attachment on a skid-steer or other means and methods approved by the engineer.

**6.2 Excavation.** The subgrade of an operated track shall be maintained with the berm edge at least 12 feet from centerline of track and not more than 26 inches below top of the rail. The contractor will not be required to make existing section meet this specification if substandard, in which case the existing section will be maintained. The contractor shall cease all work and notify

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

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

**6.4 Demolition of Existing Structures.** The contractor shall be required to take special precaution and care in connection with demolition of existing structures. The procedure for doing such work, including need of and plans for temporary falsework, shall first be approved by Railroad Engineer before work is performed, but such approval shall not relieve the contractor from liability. Before submission of plans to the Railroad Engineer for approval, the Engineer will first review such plans.

**6.5 Falsework.** The contractor shall be required to take special precaution and care to prevent any material from falling on the Railroad's right of way. The procedure for preventing material from falling, including need of and plans for temporary falsework, shall first be approved by the Railroad Engineer, but such approval shall not relieve the contractor from liability. Before submission of plans to the Railroad Engineer for approval, the Engineer will first review such plans.

## **6.6 Blasting.**

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

- (a) Blasting shall be done with light charges under the direct supervision of a responsible officer or employee of the contractor.
- (b) Electric detonating fuses shall not be used because of the possibility of premature explosions resulting from operation of two-way train radios.
- (c) No blasting shall be done without the presence of the Railroad Engineer. At least 72 hours advance notice to the person designated in the Railroad's notice of authorization to proceed as mentioned in Section 2.2 of this job special provision, the contractor shall be required to arrange for the presence of the Railroad Engineer and such flagging as the Railroad may require.
- (d) The contractor shall have at the job site adequate equipment, labor and materials and allow sufficient time to clean up debris resulting from the blasting without delay to trains, as well as correcting, at contractor's expense, any track misalignment or other damage to the Railroad's property resulting from the blasting as directed by the Railroad Engineer. If contractor's actions result in delay of trains, the contractor shall bear the entire cost thereof.

**6.6.2 The Railroad Engineer will:**

- (a) Determine the approximate location of trains and advise the contractor the approximate amount of time available for the blasting operation and clean-up.
- (b) Have the authority to order discontinuance of blasting if blasting is too hazardous or is not in accordance with this special provision.

**6.7 Maintenance of Railroad Facilities.** The contractor shall be required to maintain all ditches and drainage structures free of silt or other obstructions which may result from contractor's operations. The contractor shall promptly repair eroded areas within Railroad's right of way and repair any other damage to the Railroad's property, tenants, licensees, easement grantees and invitees. All such maintenance and repair of damages due to the contractor's operations shall be done at the contractor's expense.

**6.8 Storage of Materials and Equipment.**

**6.8.1** The contractor shall not store or stockpile construction materials or equipment closer than 25 feet to the centerline of the nearest railroad track or on the Railroad's property not covered by construction easement, contractor's permit, lease or agreement. Additionally, the contractor shall not store or leave materials or equipment within 250 feet of the edge of any highway/rail at-grade crossings. Further, both sides of a main track shall remain unobstructed for a distance of 10 feet from the exterior edge of the track at all times to allow for stopped train inspection.

**6.8.2** Machines or vehicles shall not be left unattended with the engine running. Parked machines or equipment shall be in gear with brakes set and with blade, pan or bucket lowered to the ground if so equipped. All grading or construction machinery that is left parked near the track unattended shall be effectively immobilized so that unauthorized persons cannot move such equipment.

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

temporary buildings of the contractor, and leave said right of way in a neat condition satisfactory to the Railroad Engineer.

#### **6.10 Buried Cable and Other Buried Facilities.**

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

**6.10.2** Failure to mark or identify the buried Lines, pipelines or utility facilities will be sufficient cause for the Railroad Engineer to stop construction at no cost to the Commission or Railroad until these items are completed. The contractor shall be responsible for the rearrangement of any buried facilities, Lines, pipelines or utility facilities determined to interfere with the construction. The contractor shall cooperate fully with any telecommunications companies, pipeline operators and utility facility owners in performing such rearrangements.

**7.0 Damages.** The Railroad will not assume liability for any damages to the contractor, contractor's work, employees, servants, equipment and materials caused by railroad traffic. Any cost incurred by the Railroad for repairing damages to Railroad's property or to property of the Railroad's tenants, licensees, easement grantees and invitees caused by or resulting from the contractor's operations shall be paid directly to the Railroad by contractor.

#### **8.0 Flagging Services.**

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

#### **8.2 Scheduling and Notification.**

**8.2.1** Not later than the time that approval is initially requested to begin work on the Railroad's right of way (30 days), contractor shall furnish to the Railroad and the Commission a schedule for all work required to complete the portion of the project within Railroad's right of way and arrange for a job site meeting between the contractor, the Engineer, and the Railroad Engineer. Flaggers may not be provided until the job site meeting has been conducted and the contractor's work scheduled.

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

Mr. Nathaniel Norris  
BNSF Railroad  
636-288-0534  
[Nathaniel.norris@bnsf.com](mailto:Nathaniel.norris@bnsf.com)

And

[BNSFScheduling@wilsonco.com](mailto:BNSFScheduling@wilsonco.com)

**8.2.3** If, after the flagger is assigned to the project site, emergencies arise which require the flagger's presence elsewhere, then the contractor shall delay work on the Railroad's right of way until such time as the flagger is again available. Any additional costs resulting from such delay shall be borne by the contractor and not the Railroad.

### **8.3 Payment.**

**8.3.1** The Contractor will pay the Railroad or appropriate flagging contractor directly for the cost of flagging services associated with the project and notify the MoDOT Resident Engineer of such payments.

**8.3.2** The Contractor shall be responsible for arranging needed flagging services as required by the Railroad to accomplish the highway improvement.

**8.3.3** The cost of flagging service is estimated at approximately \$1,600 per day based on an 8-hour work day and a 40-hour work week. This cost includes the base pay for the flagger, overhead, and per diem charge for travel expenses, meals and lodging.

If flagging is provided by an approved Third-Party Flagging Company, rates and billing will be governed by the agreement set up between the Contractor and the Third-Party Flagging Company at the time the services are provided. It is the responsibility of the Contractor to ensure that billing complies with applicable provisions of Volume 1, Chapter 4, §3 and Volume 6, Chapter 6 §2, Subsection 1 of the Federal-Aid Highway Program Manual issued by the Federal Highway Administration, including all current amendments.

If flagging is provided by the Railroad, the charge to the contractor by the Railroad will be the actual cost based on the rate of pay for the Railroad's employees who are available for flagging service at the time the service is required. Work by a flagger in excess of 8 hours per day or 40 hours per week but not more than 12 hours a day will result in overtime pay at 1 1/2 times the appropriate rate. Work by a flagger in excess of 12 hours per day will result in overtime pay at 2 times the appropriate rate. If work is performed on a holiday, the flagging rate is 2 1/2 times the normal rate. Railroad expenses incurred preparing and handling invoices will also be charged to the contractor and/or the Commission. Charges to the contractor and/or the Commission by the Railroad shall be in accordance with applicable provisions of Volume 1, Chapter 4, §3 and Volume 6, Chapter 6, §2, Subsection 1 of the Federal-Aid Highway Program Manual issued by the Federal Highway Administration, including all current amendments. Flagging costs are subject to change. The above estimates of flagging cost are provided for information only and are not binding in any way. Each time a flagger is called, the minimum period for billing will be the 8 hour basic day unless the flagger can be assigned to other Railroad work during the work day.

**8.3.4** In addition to the hours of providing flagging at the construction site, the flagger hours will include, but is not limited to, travel time to and from the project, time to complete paperwork for the flagging operations and time for setting warning signs/flags for the train traffic.

#### **8.4 Verification.**

**8.4.1** Any complaints concerning a flagger shall be resolved in a timely manner. If need for a flagger is questioned, please contact the Railroad Engineer and Mr. Jacob D Rzewnicki, Manager of Public Projects at 913-551-4275. All verbal complaints shall be confirmed in writing by the contractor within 5 working days with copy to the Railroad Engineer and Engineer. All written correspondence shall be addressed to the BNSF Manager of Public Projects.

**8.4.2** The Railroad flagger assigned to the project will be responsible for notifying the Engineer upon arrival at the job site on the first day, or as soon thereafter as possible, that flagging services begin and on the last day that flagger performs such services for each separate period that services are provided. The Engineer will document such notification in the project records.

#### **9.0 Haul Across Railroads.**

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



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

**10.0 Work for the Benefit of the Contractor.** All temporary or permanent changes in wire lines or other facilities which are considered necessary to the project are shown on the plans, and are included in the agreement between the Commission and the Railroad or will be covered by appropriate revisions to same which will be initiated and approved by the Commission and/or the Railroad. Should the contractor desire any changes in addition to the above, then contractor shall make separate arrangements with the Railroad for same to be accomplished at the contractor's expense.

**11.0 Cooperation and Delays.** The contractor shall arrange a schedule with the Railroad for accomplishing staged construction involving work by the Railroad or tenants, licensees, easement grantees and invitees of the Railroad. In arranging a schedule, the contractor shall ascertain, from the Railroad, the lead time required for assembling crews, materials and make due allowance. No charge of claims of the contractor against the Railroad will be allowed for hindrance or delay on account of railway traffic for any work done by the Railroad, other delay incident to or necessary for safe maintenance of railway traffic, or for any delays due to compliance with this special provision.

**12.0 Trainman's Walkways.** Along the outer side of each exterior track of multiple operated track and on each side of single operated track, an unobstructed continuous space suitable for trainman's use in walking along trains shall be maintained extending to a line not less than 12 feet from centerline of track. Any temporary impediments to walkways and track drainage encroachments or obstructions allowed during work hours while Railway's protective service is provided shall be removed before the close of each workday. Any excavation near the walkway, the contractor shall install a handrail with a 12 feet minimum clearance from centerline of track.

**13.0 Insurance.** The amount of work to be performed upon, over or under Railroad's right of way is estimated to be 1 percent of the contractor's total bid for the project.

**13.1** In addition to any other forms of insurance or bonds required under the terms of the contract and specifications, Contractor must, at its sole cost and expense, procure and maintain during the life of this Agreement the following insurance coverage:

(a) Commercial General Liability insurance. This insurance shall contain broad form contractual liability with a combined single limit of a minimum of \$2,000,000 each occurrence and an aggregate limit of at least \$6,000,000 but in no event less than the amount otherwise carried by the contractor. Coverage must be purchased on a post 2004 ISO occurrence form or equivalent and include coverage for, but not limit to the following:

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

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

- The definition of insured contract must be amended to remove any exclusion or other limitation for any work being done within 50 feet of railroad property.
- Waiver of subrogation in favor of and acceptable to Railway.
- Additional insured endorsement in favor of and acceptable to Railway.
- Separation of insureds.
- The policy shall be primary and non-contributing with respect to any insurance carried by Railway.

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

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

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

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

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

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

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

- Contractor's statutory liability under the worker's compensation laws of the state(s) in which the work is to be performed. If optional under State law, the insurance must cover all employees anyway.
- Employers' Liability (Part B) with limits of at least \$500,000 each accident, \$500,000 by disease policy limit, \$500,000 by disease each employee.

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

- Waiver of subrogation in favor of and acceptable to Railway.

(d) Railroad Protective Liability insurance naming only the Railway as the Insured with coverage of at least \$2,000,000 per occurrence and \$6,000,000 in the aggregate. The

policy Must be issued on a standard ISO form CG 00 35 10 93 and include the following:

- Endorsed to include the Pollution Exclusion Amendment (ISO form CG 28 31 10 93)
- Endorsed to include the Limited Seepage and Pollution Endorsement.
- Endorsed to remove any exclusion for punitive damages.
- No other endorsements restricting coverage may be added.
- The original policy must be provided to the Railway prior to performing any work or services under this Agreement

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

### **13.2 Other Requirements:**

**13.2.1** All policies (applying to coverage listed above) must not contain an exclusion for punitive damages and certificates of insurance must reflect that no exclusion exists.

**13.2.2** Contractor agrees to waive its right of recovery against Railway for all claims and suits against Railway. In addition, its insurers, through the terms of the policy or policy endorsement, waive their right of subrogation against Railway for all claims and suits. The certificate of insurance must reflect the waiver of subrogation endorsement. Contractor further waives its right of recovery, and its insurers also waive their right of subrogation against Railway for loss of its owned or leased property or property under contractor's care, custody or control.

**13.2.3** Contractor is not allowed to self-insure without the prior written consent of Railway. If granted by Railway, any deductible, self-insured retention or other financial responsibility for claims must be covered directly by contractor in lieu of insurance. Any and all Railway liabilities that would otherwise, in accordance with the provisions of this Agreement, be covered by contractor's insurance will be covered as if contractor elected not to include a deductible, self-insured retention or other financial responsibility for claims.

**13.2.4** Prior to commencing the Work, contractor must furnish to Railway an acceptable certificate(s) of insurance including an original signature of the authorized representative evidencing the required coverage, endorsements, and amendments and referencing the contract audit/folder number if available. Contractor shall notify Railway in writing at least 30 days prior to any cancellation, non-renewal, substitution or material alteration. Upon request from Railway, a certified duplicate original of any required policy must be furnished. Contractor should send the certificate(s) to the following address:

Railroad:  
BNSF Railway Company  
P.O. Box 140528  
Kansas City, MO 64114  
Toll Free: 877-576-2378  
Fax number: 817-840-7487  
Email: [BNSF@certfocus.com](mailto:BNSF@certfocus.com)  
[www.certfocus.com](http://www.certfocus.com)

Commission:  
Ms. Brandi Baldwin  
State Construction and Materials Engineer  
MoDOT  
P.O. Box 270  
Jefferson City, MO 65102

**13.2.5** Any insurance policy must be written by a reputable insurance company acceptable to Railway or with a current Best's Guide Rating of A- and Class VII or better, and authorized to do business in the state(s) in which the service is to be provide.

**13.2.6** Contractor represents that this Agreement has been thoroughly reviewed by contractor's insurance agent(s)/broker(s), who have been instructed by contractor to procure the insurance coverage required by this Agreement. Allocated Loss Expense must be in addition to all policy limits for coverages referenced above. Not more frequently than once every five years, Railway may reasonably modify the required insurance coverage to reflect then-current risk management practices in the railroad industry and underwriting practices in the insurance industry.

**13.2.7** If any portion of the operation is to be subcontracted by contractor, contractor must require that the subcontractor provide and maintain the insurance coverages set forth herein, naming Railway as an additional insured, and requiring that the subcontractor release, defend and indemnify Railway to the same extent and under the same terms and conditions as contractor is required to release, defend and indemnify Railway herein.

**13.2.8** Failure to provide evidence as required by this section will entitle, but not require, Railway to terminate this Agreement immediately. Acceptance of a certificate that does not comply with this section will not operate as a waiver of contractor's obligations hereunder.

**13.2.9** The fact that insurance (including, without limitation, self-insurance) is obtained by contractor will not be deemed to release or diminish the liability of contractor including, without limitation, liability under the indemnity provisions of this Agreement. Damages recoverable by Railway will not be limited by the amount of the required insurance coverage.

**13.2.10** For purposes of this section, Railway means "Burlington Northern Santa Fe LLC", "BNSF RAILWAY COMPANY" and the subsidiaries, successors, assigns and affiliates of each.

**13.2.11** Railroad will not accept binders as evidence of insurance, the original policy shall be provided. The named insured, description of the work and designation of the job site to be shown on the Policy are as follows:

(a) Named Insured: BNSF Railway Company

(b) Description and Designation:

Pavement resurfacing on both sides of the Rte. D crossing.

Greene County Rte. D Cuba Sub in Springfield, MO.

Job No. J8S0745

US DOT# 664251D MP 242.75 BNSF Cuba Sub in Springfield, MO.

**13.2.12** The contractor must notify BNSF Manager of Public Projects at [jacob.rzewnicki@bnsf.com](mailto:jacob.rzewnicki@bnsf.com) when applying for railroad insurance coverage.

**13.3** If any part of the work is sublet, similar insurance and evidence thereof in the same amounts as required of the prime contractor, shall be provided by or in behalf of the subcontractor to cover the subcontractor's operations. Endorsements to the prime contractor's policies specifically naming subcontractors and describing their operations will be acceptable for this purpose.

**13.4** All Insurance hereinbefore specified shall be carried until all work required to be performed under the terms of the contract has been satisfactorily completed within the limits of the Railroad's right of way as evidenced by the formal acceptance by the Commission. Insuring Companies

may cancel insurance by permission of the Commission and Railroad or on 30 days written notice to the Railroad and Commission.

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

- (a) Notify the Railroad's Resource Operations Center at (800) 832-5452, of such discovery.
- (b) Take safeguards necessary to protect employees, subcontractors, agents and/or third parties.
- (c) Exercise due care with respect to the release, including the taking of any appropriate measure to minimize the impact of such release

**15.0 Personal Injury Reporting.** The Railroad is required to report certain injuries as a part of compliance with Federal Railroad Administration ("FRA") reporting requirements. Any personal injury sustained by any employee of the contractor, subcontractor or contractor's invitees while on the Railroad's property shall be reported immediately, by phone or mail if unable to contact in person, to the Railroad's representative in charge of the project. The Non-Employee Personal Injury Data Collection Form is to be completed and sent by Fax to the Railroad at (817) 352-7595 and to the Railroad's Project Representative no later than the close of shift on the date of the injury.

**16.0 Failure to Comply.** In the event the contractor violates or fails to comply with any of the requirements of this special provision, the below orders will be applied. Any such orders shall remain in effect until the contractor has remedied the situation to the satisfaction of the Railroad Engineer and the Engineer.

- (a) The Railroad Engineer may require that the contractor to vacate the Railroad's property.
- (b) The Engineer may withhold all monies due to the contractor until contractor has remedied the situation to the satisfaction of the Railroad Engineer and the Engineer.

**17.0 Payment for Cost of Compliance.** No separate payment will be made for any extra cost incurred on account of compliance with this special provision. All such cost shall be included in

the contract unit price for other items included in the contract. Railroad will not be responsible for paying the contractor for any work performed under this special provision.

S. Pavement Marking Log – SW

**1.0 Description.** This work shall consist of the Contractor documenting the location of all existing pavement markings prior to coldmilling or resurfacing and installing new pavement markings to match the scheme that was in place prior to the project.

**2.0 Construction Requirements.** Prior to the start of resurfacing work, the Contractor shall document the color, type, and location of the existing pavement markings, including any change in pavement marking (e.g., solid yellow to intermittent yellow on the centerline) and no passing zones. The Contractor shall submit the method of documentation to the Engineer for approval prior to recording the existing pavement marking information.

**2.1** The existing pavement marking documentation provided by the Contractor shall include the location of existing pavement markings by either station or log mile. The Engineer shall reserve the right to make adjustments to the final pavement marking locations. The Engineer will provide the Contractor with any adjusted locations. Under no circumstances shall the Contractor make adjustments to the location of permanent pavement markings without the Engineer's approval.

**2.2** All permanent pavement markings shall be installed in accordance with Sec 620.

**3.0. Temporary Pavement Marking.** The Contractor shall provide temporary pavement marking in accordance with Sec 620 and Standard Plan 620.10. No compensation will be made to the Contractor for temporary pavement marking.

**4.0 Method of Measurement.** Measurement will be made in accordance with Sec 620.

**5.0 Basis of Payment.** No direct compensation will be made to the Contractor for compliance with this provision. All costs associated with the equipment, labor, materials, and time necessary to fulfill the requirements of this provision shall be considered completely covered by the pavement marking (Sec 620) line items in the contract.

T. Permanent Pavement Marking - SW

**1.0 Description.** This work shall consist of furnishing and placing permanent centerline, edge line, lane line markings, and preformed thermoplastic pavement marking, as specified, at locations recorded in the pavement marking log, at locations shown on the plans, as indicated in this provision, or as approved by the engineer. The preformed thermoplastic pavement marking includes, but not limited to, 24" White (Stop Bars) and 24" Yellow (Hash Mark), 6" White for Crosswalks, Turn Arrows, Railroad Crossings, Yield Markings, and the word "ONLY". This work shall be in accordance with Section 620 and specifically as follows.

**2.0 Construction Requirements.** On roadways open to traffic, permanent centerline, edge line, and lane line markings shall be in place no later than five days after the final paving operations. This requirement applies per individual route if multiple routes are included in a contract or if a 15 mile section of an individual route is open to traffic within a contract. To fulfill this requirement, the contractor may have to mobilize more than once for the installation of permanent centerline,

edge line, and lane line markings. The contractor will also need to coordinate the permanent pavement marking with the installation of rumble strips. The contractor shall place the preformed thermoplastic pavement marking after the permanent centerline, edge line, and lane line marking is installed by the contractor or by others. The contractor will have 5 five days after the permanent centerline, edge line, and lane line markings are placed to start the preformed thermoplastic pavement marking installation and shall be placed in accordance with manufacturer's recommendations or as approved by the engineer.

### **3.0 Locations.**

**3.1** Pavement marking at the new raised median islands, new right turn lane at Enterprise Avenue, the HAWK signal installation at Woodward Avenue, the new U-turn and right turn lane at Mayfair Avenue, the new U-turn at Deeswood Avenue, the new right turn lane at Ingram Mill Road, the new Traffic Separator Curb with Delineators between Ingram Mill Road and U.S. Route 65, and the new U-turn and right turn lane at Blackman Road shall be installed according the to the plan sheets or as directed by the engineer.

**3.2** Longitudinal Pavement Markings shall be installed at current station or log mile as recorded in the pavement marking log or as directed by the engineer. Center turn lane width shall be 12 feet. Thru-lane width shall be evenly divided among remaining roadway width not to exceed 11 feet per lane. An edge line will be striped throughout the project limits.

**3.3** Thermoplastic Pavement Marking. 30-inch Mid-Block marking shall be installed at all new and existing crosswalk locations within the project limits, as shown in the plans or as directed by the Engineer.

**4.0 Basis of Payment.** The accepted quantity of permanent pavement marking paint and preformed thermoplastic pavement marking will be paid for at the contract unit price for each of the pay items include in the contract. Payment will be considered full compensation for all labor, equipment, material or time necessary to complete the described work including any other incidental items.

### **U. Contractor Furnished, Contractor Installed Radar Detection System**

**1.0 Description.** This work shall consist of providing radar detection for all traffic signal installations. The radar detection shall be in accordance with the standard specifications and installed to provide detection at locations as shown on the plans or as directed by the engineer in accordance with Sec 902.

**1.1 Equipment.** Radar equipment must meet or exceed all the following requirements.

**1.1.1** Equipment must be FCC certified.

**1.1.2** Equipment must meet all NEMA TS2-2003 specifications for traffic control equipment.

**1.1.3** Each radar unit must be composed of multiple sensors to establish two-dimensional coverage.

**1.1.4** Radar Detection must be compatible with SDLC inputs.

**2.0 Construction Requirements.** The contractor shall be responsible for providing and installing all necessary items to make the new radar detection system operational with stop bar presence detection and count detection for each lane of travel. Input BIU 9 shall be used for presence detector inputs according to the following chart.

| Vehicle Detection Assignments |       |    |          |            |      |
|-------------------------------|-------|----|----------|------------|------|
| PRESENCE DETECTION            | BIU   | IO | Detector | Call Phase | Mvmt |
|                               | BIU 9 | 1  | 1        | 1          | SBL  |
|                               |       | 2  | 2        | 2          | NBT  |
|                               |       | 3  | 3        | 3          | EBL  |
|                               |       | 4  | 4        | 4          | WBT  |
|                               |       | 5  | 5        | 5          | NBL  |
|                               |       | 6  | 6        | 6          | SBT  |
|                               |       | 7  | 7        | 7          | WBL  |
|                               |       | 8  | 8        | 8          | EBT  |
|                               |       | 9  | 9        |            |      |
|                               |       | 10 | 10       | 2          | NBR* |
|                               |       | 11 | 11       |            |      |
|                               |       | 12 | 12       | 4          | WBR* |
|                               |       | 13 | 13       |            |      |
|                               |       | 14 | 14       | 6          | SBR* |
|                               |       | 15 | 15       |            |      |
|                               | 16    | 16 | 8        |            | EBR* |

\*Right turn presence detection only used if the RT lane is signalized

BIU 10 and 11 shall be used for count detector inputs according to the following chart.

| Vehicle Detection Assignments |        |    |          |            |       |
|-------------------------------|--------|----|----------|------------|-------|
| COUNT DETECTION               | BIU    | IO | Detector | Call Phase | Lane  |
|                               | BIU 10 | 1  | 17       | 1          | SBL 1 |
|                               |        | 2  | 18       | 1          | SBL 2 |
|                               |        | 3  | 19       | 1          | SBL 3 |
|                               |        | 4  | 20       | 2          | NBT 1 |
|                               |        | 5  | 21       | 2          | NBT 2 |
|                               |        | 6  | 22       | 2          | NBT 3 |
|                               |        | 7  | 23       | 2          | NBT 4 |
|                               |        | 8  | 24       | 2          | NBR 1 |
|                               |        | 9  | 25       | 3          | EBL 1 |
|                               |        | 10 | 26       | 3          | EBL 2 |
|                               |        | 11 | 27       | 3          | EBL 3 |
|                               |        | 12 | 28       | 4          | WBT 1 |
|                               | 13     | 29 | 4        | 4          | WBT 2 |



|  |       |    |    |   |       |
|--|-------|----|----|---|-------|
|  |       | 14 | 30 | 4 | WBT 3 |
|  |       | 15 | 31 | 4 | WBT 4 |
|  |       | 16 | 32 | 4 | WBR 1 |
|  | BIU11 | 1  | 33 | 5 | NBL 1 |
|  |       | 2  | 34 | 5 | NBL 2 |
|  |       | 3  | 35 | 5 | NBL 3 |
|  |       | 4  | 36 | 6 | SBT 1 |
|  |       | 5  | 37 | 6 | SBT 2 |
|  |       | 6  | 38 | 6 | SBT 3 |
|  |       | 7  | 39 | 6 | SBT 4 |
|  |       | 8  | 40 | 6 | SBR 1 |
|  |       | 9  | 41 | 7 | WBL 1 |
|  |       | 10 | 42 | 7 | WBL 2 |
|  |       | 11 | 43 | 7 | WBL 3 |
|  |       | 12 | 44 | 8 | EBT 1 |
|  |       | 13 | 45 | 8 | EBT 2 |
|  |       | 14 | 46 | 8 | EBT 3 |
|  |       | 15 | 47 | 8 | EBT 4 |
|  |       | 16 | 48 | 8 | EBR 1 |

**3.0 Method of Measurement.** Method of measurement will be per intersection, complete in place including all necessary incidental items to complete the work. An intersection is defined as all legs in each direction including all lanes on each leg of the intersection.

**4.0 Basis of Payment.** Payment for the installation of the radar detection system will be completely covered by the contract unit price for Pay Item No. 902-99.02, Contractor Furnished, Contractor Installed Radar Detection System, per each.

#### V. Relocate Existing Signal Heads

**1.0 Description.** This item provides for removing, relocating, and remounting existing signal heads to their existing mast arm such that they will be properly positioned over the center of the lane at locations shown on the signal sheets.

**2.0 Construction Requirements.** The contractor shall remove the existing signal head from the locations shown and then remount the existing signal head in the appropriate location shown on the signal sheets. All holes and openings created in signal structures or existing from previous signal equipment locations, shall be plugged and/or filled with a permanent sealant or epoxy putty to prevent water intrusion or vermin access. All work shall be in accordance with the construction requirements of Section 902.

**3.0 Method of Measurement.** Measurement will be made per each for removing, relocating, and remounting existing signal heads to the existing mast arm over the center of the newly striped lane. Measurement for any signal mounting hardware, cable, and epoxy putty will be made in accordance with Section 902.

**4.0 Basis of Payment.** All cost incurred for removing, relocating, and remounting existing signal heads at the locations shown, complete in place, will be paid for at the contract unit price for Pay Item 902-99.02, Relocate Signal Head, per each. Payment for all other labor, equipment, material, and incidental items will be made in accordance with Section 902 and paid for at the contract unit price for each of the pay items included in the contract.

W. Work Zone Segment Commitment

**1.0 Description.** As a result of discussions with business owners, the Commission's representative has committed to various items that may impact the construction of this project. The intent of this special provision is to inform the contractor of these commitments so that all parties have the same reasonable expectation for the construction of this project.

**2.0 Construction Requirements.** The contractor shall not perform work between Eastgate Avenue/S Bedford Avenue and Blackman Road until January 4, 2027. In addition, the contractor shall not perform work between Eastgate Avenue/S Bedford Avenue and Blackman Road between November 1, 2027 and January 1, 2028. Full ingress/egress to all businesses shall be maintained during these timeframes, unless approved by the property owner and the engineer.

**3.0 Basis of Payment.** No direct payment will be made to the contractor to recover the cost of equipment, labor, materials or time required to fulfill the above provision, unless specified elsewhere in the contract document.

X. Early Notice to Proceed

**1.0 Description.** The contractor will be given a Notice to Proceed Date for this project, as stipulated in JSP B – Contract Liquidated Damages. All contracts shall be executed and returned to the Commission by or before the end of the day on the business day prior, in order to commence work on the Notice to Proceed date.

**2.0** The contract will be distributed electronically by the Commission for execution through DocuSign® upon award.

**3.0** As part of the contract execution process, the contractor shall complete and deliver the original documents/forms listed below, immediately following award of the contract.

Contract Bond Form (with associated Power of Attorney Form)  
Contractor Acknowledgement Form  
Workers Eligibility Verification Affidavit

**4.0** These documents will be provided to the contractor through Bid Express®/BidX® correspondence immediately following Commission award. A checklist with instructions on how to complete these documents will be provided with said award correspondence. In order to expedite contract execution, contractors are encouraged to follow the instructions on the checklist. Inquiries related to completing the listed documents may be directed to the following:

Job No.: J8S0745  
Route: D  
County: Greene

Rodney Braman  
Phone: (573) 751-9253  
Email: [Rodney.Braman@modot.mo.gov](mailto:Rodney.Braman@modot.mo.gov)

**5.0** Potential Bidders without a current MoDOT issued DocuSign® access code shall notify Ryan Martin prior to the bid to determine the necessary steps to establish a Contractor specific access code. If another MoDOT District Office location other than the one listed below is more convenient, please contact Ryan Martin.

CENTRAL OFFICE  
Ryan Martin  
Bidding and Contract Services Engineer  
105 West Capitol  
Jefferson City, MO 65102-0270  
Phone: (573) 526-2923  
Email: [Ryan.Martin@modot.mo.gov](mailto:Ryan.Martin@modot.mo.gov)

Y. Liquidated Savings Specified

**1.0 Description.** If construction of proposed improvements as shown in the contract and plans for J8S0745, J8S3133, and J8S3153 on Route D, is not completed by December 31, 2027, 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 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 all proposed improvements as shown in the contract and plans for J8S0745, J8S3133 and J8S3153. To qualify for this incentive payment, all work as directed in the contract and on the plans shall be completed, including striping and open to traffic. An incentive payment of \$200,000 will be paid if the work described above is completed by December 31, 2027. The maximum amount paid as liquidated savings will not exceed \$200,000.

**2.1** 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.

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

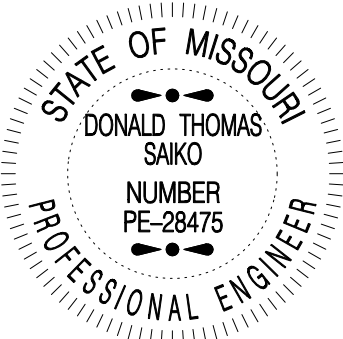
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Route: D

County: Greene

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|                                                                                                                                                                |                                                                                                                                                                |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <p>THIS SHEET HAS BEEN<br/>SIGNED, SEALED AND DATED<br/>ELECTRONICALLY.</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                          |
|                                                                                                                                                                | <b>GARVER</b><br>7509 NW Tiffany Springs Parkway<br>STE 200<br>Kansas City, MO 64153<br>Certificate of Authority: 2008013090<br>Consultant Phone: 816-298-6465 |
|                                                                                                                                                                | If a seal is present on this sheet, JSP's<br>have been electronically sealed and<br>dated.                                                                     |
|                                                                                                                                                                | JOB NUMBER: J8S3133<br>GREENE COUNTY, MO<br>DATE PREPARED: 06/02/2026                                                                                          |
|                                                                                                                                                                | ADDENDUM DATE:                                                                                                                                                 |

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

JOB  
SPECIAL PROVISION

A. General - Federal JSP-09-02M

**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 2026 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- 13-01E

**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.

Job No.: J8S3133  
Route: D  
County: Greene

Notice to Proceed: October 20, 2026  
Contract Completion Date: June 30, 2028

**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 | Calendar Days | Daily Road User Cost |
|---------|---------------|----------------------|
| J8S3133 | N/A           | \$7,600              |
| J8S3153 | N/A           | \$7,600              |
| J8S0745 | N/A           | \$7,600              |

**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.

**5.0 Liquidated Damages for Winter Months.** Delete Sec 108.8.1.3 (a)

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

C. Work Zone Traffic Management JSP-02-06N

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

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

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

## **2.0 Traffic Management Schedule.**

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

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

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

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

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

### **2.5.1 Traffic Safety.**

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

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



### 3.0 Work Hour Restrictions.

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

| <b>When Independence Day falls on:</b> | <b>The Holiday is Observed on:</b> | <b>Halt Lane Closures beginning at:</b> | <b>Allow Lane Closures to resume at:</b> |
|----------------------------------------|------------------------------------|-----------------------------------------|------------------------------------------|
| 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, 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** Any work requiring a reduction in the number of through lanes of traffic shall be completed during nighttime hours. Nighttime hours shall be considered to be 8:00 p.m. to 6:00 a.m. for this project.

### 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.

**D. Emergency Provisions and Incident Management**

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

|                                                                                         |
|-----------------------------------------------------------------------------------------|
| Springfield Resident Engineer: Brad Gripka 417-895-6720 (Office) or 417-529-2469 (Cell) |
|-----------------------------------------------------------------------------------------|

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

|                                                             |
|-------------------------------------------------------------|
| Missouri Highway Patrol: (417) 895-6868                     |
| Greene County Sheriff's Department: (417) 868-4040          |
| City of Springfield Police Department: (417) 864-1810       |
| City of Springfield Fire Department: (417) 874-2300         |
| MoDOT Customer Service (417) 895-7600                       |
| Emergency Only Numbers                                      |
| 911                                                         |
| (*55 cell phone – Missouri Highway Patrol)                  |
| (417-864-1160 cell – MoDOT Incident Management Coordinator) |

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

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

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

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

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

Kristi Bachman, Project Contact  
Southwest District  
3025 E Kearney St.  
Springfield, MO 65803

Telephone Number: 417-834-7171  
Email: [kristi.bachman@modot.mo.gov](mailto:kristi.bachman@modot.mo.gov)

**1.1** All questions concerning the bid document preparation can be directed to the Central Office – Design as listed below.

Telephone Number: (573) 751-2876  
Email: [BCS@modot.mo.gov](mailto:BCS@modot.mo.gov)

**2.0** Upon award and execution of the contract, the successful bidder/contractor shall forward all questions and coordinate the work with the engineer listed below:

Brad Gripka, Resident Engineer  
Southwest District  
2459 North Mayfair  
Springfield, MO 65803

Office Telephone Number: 417-895-6720  
Mobile Telephone Number: 417-834-6976  
Email: [donald.gripka@modot.mo.gov](mailto:donald.gripka@modot.mo.gov)

F. Supplemental Revisions JSP-18-01KK

- 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 or Steel Products.**

The contractor's attention is directed to Title 23 CFR 635.410 *Buy America Requirements*. Where articles, materials or supplies that consist wholly or predominantly of iron or steel or a combination of both 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. Predominantly of iron or steel or a combination of both means that the cost of the iron and steel content exceeds 50 percent of the total cost of all its components. 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** 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.

**106.9.1.2** "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.

**106.9.1.3** 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.

**106.9.1.3.1** 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 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.

**106.9.1.3.2** 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.

**106.9.1.3.3** 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.

**106.9.1.4** 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.

**106.9.2 Buy America Requirements for Construction Materials other than iron or steel products.**

Construction materials mean 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

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

Manufactured products mean articles, materials or supplies that have been processed into a specific form and shape, or combined with other articles, materials or supplies to create a product with different properties than the individual articles, materials or supplies. If an item is classified as an iron or steel product, an excluded material, or other product category as specified by law or in 2 CFR part 184, then it is not a manufactured product. However, an article, material or supply classified as a manufactured product may include components that are iron or steel products,

excluded materials, or other product categories as specified by law or in 2 CFR part 184. Mixtures of excluded materials delivered to a work site without final form for incorporation into a project are not a manufactured product.

**106.9.3.1** Produced in the United States, in the case of manufactured products, means:

(A) For projects obligated on or after October 1, 2025, the product was manufactured in the United States; and

(B) For projects obligated on or after October 1, 2026, the product was manufactured in the United States and the cost of the components of the manufactured product that are mined, produced, or manufactured in the United States is greater than 55 percent of the total cost of all components of the manufactured product.

**106.9.3.2** (i) With respect to precast concrete products that are classified as manufactured products, components of precast concrete products that consist wholly or predominantly of iron or steel or a combination of both shall meet the requirements of paragraph (b) of this section. The cost of such components shall be included in the applicable calculation for purposes of determining whether the precast concrete product is produced in the United States.

(ii) With respect to intelligent transportation systems and other electronic hardware systems that are installed in the highway right of way or other real property and classified as manufactured products, the cabinets or other enclosures of such systems that consist wholly or predominantly of iron or steel or a combination of both shall meet the requirements of paragraph (b) of this section. The cost of cabinets or other enclosures shall be included in the applicable calculation for purposes of determining whether systems referred to in the preceding sentence are produced in the United States.

**106.9.4 Waiver for De Minimis Costs for Manufactured and Construction Materials other than iron or steel products.**

"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.

- 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 dynamic 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.

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

**15.0 Bidder's List Quote Summary.** MoDOT is a recipient of federal funds and is required by 49 CFR 26.11 to provide data about its DBE program. All bidders who seek to work on federally assisted contracts must submit data about all DBE and non-DBEs in accordance with Sec 102.7.9. MoDOT will not compare the submitted Bidder's List Quote Summary to any other documents or submittals, pre or post award. All information will be used by MoDOT in accordance with 49 CFR 26.11 for reporting to USDOT and to aid in overall DBE goal setting.

- **Add Sec 102.7.9 to include the following:**

**102.7.9 Bidder's List Quote Summary.** Each bidder shall submit with each bid a summary of all subcontractors, material suppliers, and service providers (e.g. hauling) considered on federally funded projects pursuant to 49 CFR 26.11. The bidder will provide the firm's name, the corresponding North American Industry Classification System (NAICS) code(s) the firm(s) were considered for, and whether or not they were used in the bid. The information submitted should be the most complete information available at the time of bid. The information shall be disclosed on the Bidder's List Quote Summary form provided in the bidding documents and submitted in accordance with Sec 102.10. Failure to disclose this information may result in a bid being declared irregular.

G. Liquidated Damages Specified

**1.0 Description.** If any lanes of Route D (Sunshine St.) are not open to traffic by 6:00 a.m. each day following a nighttime lane closure, the Commission, the traveling public, and state and local police and governmental authorities will be damaged in various ways, including but not limited to, increased construction administration cost, potential liability, traffic and traffic flow regulation cost, traffic congestion and motorist delay, with its resulting cost to the traveling public. These damages are not reasonably capable of being computed or quantified. Therefore, the contractor will be charged with liquidated damages specified according to the following schedule.

- (a) If any lane or lanes of Route D (Sunshine St.) are closed for any time between 6:00 a.m. to 7:00 a.m., the contractor shall be charged in the amount of \$800 for that hour or any fraction of that hour.
- (b) If any lane or lanes of Route D (Sunshine St.) are closed for any time between 7:00 a.m. to 8:00 a.m., the contractor shall be charged in the amount of \$1,200 for that hour or any fraction of that hour.
- (c) If any lane or lanes of Route D (Sunshine St.) are closed for any time between 8:00 a.m. to 9:00 a.m., the contractor shall be charged in the amount of \$1,000 for that hour or any fraction of that hour.
- (d) If any lane or lanes of Route D (Sunshine St.) are closed for any time between 9:00 a.m. to 10:00 a.m., the contractor shall be charged in the amount of \$1,400 for that hour or any fraction of that hour.

Job No.: J8S3133

Route: D

County: Greene

- (e) If any lane or lanes of Route D (Sunshine St.) are closed for any time after 10:00 a.m., the contractor shall be charged in the amount of \$1,400 for the remaining day not to exceed \$5,800 for each full day or fraction of a day that all lanes are not open to traffic.

**1.1** All liquidated damages specified are 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 excess closure time.

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

H. 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<br/>Adjustment</u> | <u>Type</u>    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|----------------|
| AT&T – Distribution<br>Scott Hall<br>600 St. Louis, Room 630<br>Springfield, MO 65806<br>Phone: 417-849-8265<br>Email: <a href="mailto:sh4949@att.com">sh4949@att.com</a>                                                      | Yes                                  | Communications |
| Brightspeed<br>Nick Bridges<br>Phone: 479-238-5515<br>Email: <a href="mailto:nick.bridges@brightspeed.com">nick.bridges@brightspeed.com</a>                                                                                    | None                                 | Communications |
| City Utilities of Springfield - Electric T&D<br>Seth Day<br>301 E. Central St.<br>Springfield, MO 65801<br>Phone: 417-831-8712<br>Email: <a href="mailto:seth.day@cityutilities.net">seth.day@cityutilities.net</a>            | Yes                                  | Power          |
| City Utilities of Springfield - Gas & Water<br>Ryan Jeppson<br>301 E. Central St.<br>Springfield, MO 65801<br>Phone: 417-831-8643<br>Email: <a href="mailto:ryan.jeppson@cityutilities.net">ryan.jeppson@cityutilities.net</a> | Yes                                  | Gas & Water    |

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County: Greene

|                                                                                                                                                                                                                                                                                                                                                                                                               |      |                        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------------------------|
| City Utilities of Springfield - SpringNet<br>Eric Cochran<br>301 E Central St.<br>Springfield, MO 65801<br>Phone: 417-831-8612<br>Email: <a href="mailto:ecochran@springnet.net">ecochran@springnet.net</a>                                                                                                                                                                                                   | Yes  | Communications         |
| MoDOT – Signals, Lighting, ITS<br>Joe Dotson<br>2455 N. Mayfair Ave.<br>Springfield, MO 65803<br>Phone: 417-733-0664<br>Email: <a href="mailto:joseph.dotson@modot.mo.gov">joseph.dotson@modot.mo.gov</a>                                                                                                                                                                                                     | Yes  | Signals, Lighting, ITS |
| City of Springfield – Traffic<br>Brian Doubrava<br>1107 W. Chestnut Expressway<br>Springfield, MO 65802<br>Phone: 417-864-1163<br>Email: <a href="mailto:bdoubrava@springfieldmo.gov">bdoubrava@springfieldmo.gov</a>                                                                                                                                                                                         | None | Signals/ITS            |
| City of Springfield – Clean Water Services<br>Matt Taylor<br>840 Boonville Ave.<br>Springfield, MO 65802<br>Phone: 417-864-1934<br>Email: <a href="mailto:mtaylor@springfieldmo.gov">mtaylor@springfieldmo.gov</a>                                                                                                                                                                                            | None | Sewer                  |
| Bluebird<br>Mark Bower<br>9201 Ward Parkway, Suite 300<br>Kansas City, MO 64144<br>Phone: 417-708-3202<br>Email: <a href="mailto:mark.bower@bluebirdfiber.com">mark.bower@bluebirdfiber.com</a>                                                                                                                                                                                                               | Yes  | Communications         |
| Lumen<br>Kimberly Singleton, Engineering Manager<br>Phone: 419-631-4683<br>Email: <a href="mailto:kimberly.singleton@lumen.com">kimberly.singleton@lumen.com</a><br>Olsson (Lumen's contract engineer)<br>Sandra Munoz-Cabuya<br>7301 W. 133 <sup>rd</sup> Street, Suite 200<br>Overland Park, KS 66213<br>Phone: 913-748-2646<br>Email: <a href="mailto:smunozcabuya@olsson.com">smunozcabuya@olsson.com</a> | Yes  | Communications         |

Job No.: J8S3133  
Route: D  
County: Greene

|                                                                                                                                                                                 |     |                |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----------------|
| Mediacom<br>Kyle Keller<br>1533 S. Enterprise Ave.<br>Springfield, MO 65804<br>Phone: 417-496-8577<br>Email: <a href="mailto:kkeller@mediacomcc.com">kkeller@mediacomcc.com</a> | Yes | Communications |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----------------|

|                                                                                                                                                                                          |      |                |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------------|
| Verizon<br>Bryan Burger<br>10740 Nall Ave., Suite 400<br>Overland Park, KS 66211<br>Phone: 816-204-4494<br>Email: <a href="mailto:bryan.burger@verizon.com">bryan.burger@verizon.com</a> | None | Communications |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------------|

|                                                                                                                                                                                                              |      |                |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------------|
| Windstream<br>Kelly Wingfield<br>3540 SW 61 <sup>st</sup> Street<br>Des Moines, IA 50321<br>Phone: 515-559-4031<br>Email: <a href="mailto:kelly.wingfield@windstream.com">kelly.wingfield@windstream.com</a> | None | Communications |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------------|

**1.1 Disclaimer and Verification of Utility Information.** 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 Potholing of Utilities.** The Contractor shall field verify that the proposed traffic signal base locations will not need to be shifted to avoid utilities prior to ordering the traffic signal equipment. The Contractor shall be proactive and pothole all utilities falling within the locate tolerance for the proposed signal bases. If a conflict is determined, the Contractor shall shift the signal base location, as approved by the Engineer to mitigate the conflict. The Contractor shall coordinate construction activities with the utilities and take measures to ensure the integrity of the existing facilities are not disturbed during construction. The contractor will be compensated for the additional mast arm length if required. No direct payment will be made for compliance to this specification.

**1.3 Overhead Primary Electric.** Various utilities listed above have overhead lines within the project limits in the vicinity of the Contractor's work. The contractor shall comply with the Missouri Overhead Powerline Safety Act; this statute makes it illegal for an unauthorized person or entity to work or bring equipment within 10 feet of a high voltage line that has not been covered or de-energized. The purpose of the Missouri Overhead Powerline Safety Act is to ensure the safety of the public when working around overhead power lines. If the contractor needs line cover when working near a primary powerline, then the contractor shall notify that utility owner a minimum of 14 days in advance of needing line cover. Most power providers perform this service free of charge for municipally driven projects. The contractor shall be responsible for any damage to the

overhead lines caused by their operations. There will be no direct payment for compliance to this specification.

**1.4 Continuous Whiteway Lighting.** The proposed roadway improvements will be impacting continuous whiteway lighting owned and maintained by City Utilities along the south side of Sunshine between Plaza and Ingram Mill. CU intends to renew this lighting circuit. By agreement, when whiteway lighting is impacted by a municipal project, City Utilities will provide a lighting design to be included in the roadway contract. The lighting design is only for foundation and conduit installation along with any necessary secondary risers. Once these items have been installed by the roadway contractor, CU crews will provide and install the wire, poles, and luminaires. CU's plan (Drawing 95153) for conduit and foundations is included as part of the roadway contract. The bid items for the whiteway work are included with the other roadway bid items. The whiteway items are shown as 99 numbers in the bid book but all new installations are standard CU bid items. The roadway contractor will be required to provide and install these items in accordance to City Utilities' standard drawing located at: <https://www.cityutilities.net/business/construction/>. The contractor shall coordinate construction activities with CU's Contract Inspector, Corey Bryan (417-450-7347).

**1.5 Coordination with City Utilities Electric.** As part of the roadway improvements, the contractor will be required to install three new Type 2 Power Supplies for the proposed signal modifications. The specific details at each location are outlined in the subsections below. The roadway contractor will be required to pick up any CU provided items from their stockroom located at 742 N. Belcrest and transport these items to the site for installation. The contractor shall coordinate construction activities with CU's Contract Inspector, Corey Bryan (417-450-7347). All work performed for the future ownership/maintenance of City Utilities shall conform to their standard drawing located at: <https://www.cityutilities.net/business/construction/>. CU Electric will not install a meter in the new power supply until it has been inspected and approved by Springfield's Building Development Services (BDS). MoDOT will be responsible for submitting the applications to BDS. The contractor will be required to pay the \$171 fee for each BDS permit. All costs required for compliance with this special provision shall be included in the contractor's submitted unit price for item 902-86.20 Power Supply Assembly, Type 2, per each.

**1.6 Coordination with City Utilities Gas.** There are several existing gas valves along the Sunshine corridor that may require an elevation adjustment on the cover to meet the new sidewalk/approach grade. The contractor shall be responsible for coordinating the necessary elevation adjustments with Rudy Schroeder (417-225-2250) in CU Gas operations. City Utilities has requested a minimum of two weeks advance notice for scheduling purposes. The contractor shall be responsible for removing any concrete around the existing valve and establish the necessary height adjustment for CU crews. There will be no direct payment for compliance to this specification.

#### **1.7 Coordination with City Utilities Water.**

**1.7.1 Water Meters and Valves.** There are several existing water valves and water meters along the Sunshine corridor that may require an elevation adjustment on the cover to meet the new sidewalk/approach grade. The contractor shall be responsible for coordinating the necessary elevation adjustments with Terry McKnight (417-830-8671) in CU Water operations. City Utilities has requested a minimum of two weeks advance notice for scheduling purposes. The contractor will be responsible for removing any concrete around the existing valve/meter and establish the necessary height adjustment for CU crews. There will be no direct payment for compliance to this specification.

1.7.2 Water Renewal 93745. City Utilities has a water renewal project on the north side of Sunshine starting at the west side of Oak Grove and goes east approximately 415ft to Parcel 16. The proposed parallel water main will be installed in a private easement north of the R/W. City Utilities has issued the job for construction utilizing internal crews to complete this water renewal. The contractor is advised this work may still be under construction when the notice to proceed is given. If the water renewal is still under construction, then the roadway contractor shall coordinate work zone operations and site access with City Utilities' crews. There will be no direct payment for compliance to this specification.

1.7.3 Fire Hydrant Addition. At the time of project advertisement, the City of Springfield and City Utilities of Springfield were in negotiations for the addition of three new fire hydrants on the Sunshine corridor. The additional hydrants are generally located at: Sta 26+42 Lt., Sta 93+75 Rt., and Sta 96+55 Lt. The locations at Sta 26+42 and Sta 93+75 will require a new 8" water main to be installed under Sunshine. The Sta 26+42 location will also require a new parallel water main to be installed on the north side of Sunshine going approximately 235ft to the east. If the addition of the new fire hydrants is approved, then the work will be performed by either City Utilities' crews or an approved City Utilities contractor. The roadway contractor is advised this additional water work is likely to take place during construction operations for the proposed roadway improvements. The contractor shall refrain from making any improvements in these areas until the additional water work has been completed. The roadway contractor shall coordinate work zone operations and site access with City Utilities crews and/or contractor. There will be no direct payment for compliance to this specification.

**1.8 MoDOT Signals & ITS.** The proposed revisions and additions to MoDOT's signals and ITS equipment are included as part of the roadway contract. The contractor shall install and/or modify the equipment as shown in the plans and job special provisions. All cost associated with this work shall be completely covered in the contractor's submitted bid prices for the signal and ITS items included in the roadway contract.

## **2.0 Enterprise Signal.**

### **2.1 City Utilities – Electric.**

**2.1.1 Primary Power.** City Utilities has dual three phase circuits running parallel to Sunshine on the south side of the roadway along with a three phase crossing of Sunshine on the west side of Enterprise. The three phase crossing is clear of the proposed improvements. Preliminary site investigation indicated that the 10ft minimum vertical clearance to overhead primary would not be met under existing conditions. CU intends to replace the poles on both sides of Enterprise with taller structures. Depending on additional height needed for the minimum clearance, CU may need to replace one additional pole on each side of Enterprise. CU anticipates it will be spring of 2027 before any work will begin on their primary power facilities. SpringNet, AT&T, and Mediacom all have aerial facilities attached to the three phase power line along the south side of Sunshine. All three will need to transfer their facilities to CU's new poles. It is anticipated this transfer process will take three weeks to complete. The contractor shall call for line cover as noted in paragraph 1.3 above when installing the new signal equipment under the energized primary line.

**2.1.2 Secondary Power.** The new Type 2 Power Supply is to be installed in the northeast quadrant next to the signal and ITS cabinets. The power source for the new power supply will come from the existing power pole in the northwest quadrant located near Sta 32+16. This existing wood pole supports a three phase primary drop to the north as well as the secondary

power drop to the existing signal meter. The contractor shall intercept the existing secondary conduit from the wood pole to the existing power supply and install a new secondary pedestal. From the new secondary pedestal, the contractor shall provide and install new conduit and wire going east under Enterprise over to the new Type 2 Power Supply. City Utilities will provide the secondary pedestal for contractor installation. CU will also provide and install the wire down the pole and make the splice connection inside the secondary pedestal. The contractor shall reference CU Drawing 95153 for contracted scope of work.

**2.1.3 Whiteway Lighting.** CU has an existing light pole located on the north side of the roadway near Sta 34+70 in conflict with the new sidewalk. This is the last light on the lighting circuit being fed from the east. The light pole is to be relocated to the northeast back to the new R/W line and will be addressed in CU's whiteway drawings. The contractor shall reference CU Drawing 95153 for contracted scope of work. See section 1.4 above for additional information.

**2.2 AT&T.** AT&T has a duct bank running parallel to Sunshine on the north side of the roadway. Based on recent locate marks, the duct bank is clear of the proposed signal bases 1 and 4 on the north side of Sunshine. AT&T has a 900pr and 24FO in the northwest quadrant, three 24FO in the northeast quadrant, and a 600pr and 48FO in the southeast quadrant. Based on recent locate marks, these facilities appear to fall outside of the construction limits for the new signal bases. The contractor shall refer to section 1.2 if potholing is required.

**2.3 City Utilities – Gas and Water.** In the northeast quadrant, City Utilities has an existing fire hydrant in conflict with the new WB to NB right turn lane. CU crews will relocate this hydrant during construction. The contractor shall contact CU a minimum of two weeks in advance of needing the hydrant relocated. The contractor shall provide CU crews with the necessary horizontal and vertical control for this relocation. Also in the northeast quadrant, CU has a 1¼" plastic gas service going to 2323 E. Sunshine. Locate marks for this service placed it 26" north of the centerline for signal base 1. In the southeast quadrant, CU has a 12" CI water main north of signal base 3 and a 6" steel gas main south of signal base 3. Based on recent locate marks, the water main is 37" north of the centerline of the signal base and the gas main is 41" south of the signal base. The contractor shall pothole both of these facilities to verify the exact location prior to excavating for the new signal base.

**2.4 Bluebird and Lumen.** In 2019, Bluebird and Lumen did a parallel fiber installation along Sunshine throughout the entire project limits. The installation consisted of a five conduit package pulled through the same bore. Three of the conduits are owned by Lumen and two conduits are owned by Bluebird. Lumen and Bluebird have separate handholes in close proximity along the corridor to isolate ownership. At the Enterprise intersection, the conduit package is on the south side of Sunshine. Recent locates indicate the conduit packing is clear of signal base 2 but falls within the construction limits of signal base 3. If potholing confirms a conflict exists, Bluebird and Lumen intend to expose and shift the conduit package to the north to clear the new signal base. The shift will be performed during construction after the existing sidewalk and paved approach has been removed. The contractor shall be advise to verify this potential conflict early in construction because it can take several weeks for Bluebird and Lumen to mobilize a contractor.

### **3.0 Pedestrian Hawk Signal (2910 E. Sunshine).**

#### **3.1 City Utilities Electric.**

**3.1.1 Primary Power.** City Utilities has dual three phase circuits running parallel to Sunshine on the north side of the roadway. Preliminary investigation indicates final vertical clearance can be



obtained above the proposed signal post/mast arm at base 2. If the minimum clearance cannot be obtained, then CU will replace the existing poles on both sides of the proposed signal base with taller structures. CU anticipates it will be spring of 2027 before any work will begin on their primary power facilities. SpringNet, AT&T, and Mediacom all have aerial facilities attached to the three phase power line. All three will need to transfer their facilities to CU's new poles. It is anticipated this transfer process will take three weeks to complete. The contractor shall call for line cover as noted in paragraph 1.3 above when installing the new signal equipment under the energized primary line.

**3.1.2 Secondary Power.** The power source for the new Type 2 Power Supply will come from a new pole set by City Utilities generally located near Sta 75+30, 41ft Rt. CU will provide the secondary pedestal and stand-off brackets for roadway contractor installation. The roadway contractor shall furnish and install the conduit (including riser conduit) and wire from the new power supply to CU's secondary pedestal. CU will provide and install the wire down the pole and make the connection inside the secondary pedestal. Refer to section 1.5 above for additional requirements associated with new power services. CU crews will also be installing a luminaire on the new pole to light the east end of the proposed raised median. The contractor shall reference CU Drawing 95153 for the contracted scope of work.

**3.2 AT&T.** AT&T has a duct bank running parallel to Sunshine on the north side of the roadway at this location. Based on recent locate marks, the duct bank falls within the construction limits of signal base 2. AT&T has a 50pr line running parallel to Sunshine on the south side of the roadway. Based on recent locate marks, this 50pr line falls within the construction limits of signal base 1. The contractor shall refer to potholing requirements in paragraph 1.2 above. If a conflict is verified on the south side, AT&T will perform a horizontal shift on their cable to clear the base construction. If a conflict is verified with their duct bank on the north side, it will be necessary to change the offset on the signal base to clear. The offset will likely be to the north to provide ADA clearance along the roadway for the proposed sidewalk.

**3.3 City Utilities – Gas and Water.** CU has a 16" DI water main and a 6" steel gas main running parallel to Sunshine on the north side of the roadway. Based on recent locates, the water main is located 56" south of the centerline of base 2 and the gas main is located 32" north of the centerline of base 2. Both facilities appear to be clear of signal base 2 as planned. Depending on the results of contractor potholing of the duct bank noted in 3.2 above, the proposed signal base may need to be shifted to clear both facilities.

**3.4 Bluebird and Lumen.** The fiber installation noted in 2.4 above runs along the south side of Sunshine at this location. Recent locates show the conduit package being 35" north of the centerline of proposed signal base 1. Based on these locate marks, the Bluebird/Lumen conduit package is clear of the base excavation.

#### **4.0 U-Turn/EB Right Turn Lane West of Mayfair.**

**4.1 City Utilities Whiteway Lighting.** CU has an existing light pole on the right side near Sta 92+09 that falls within the limits of the new pavement. City Utilities intends to renew the lighting circuit on the south side of Sunshine between approximate Sta 91+00 to Sta 104+20. The contractor shall refer to CU Drawing 95153 for the contracted scope of work. See section 1.4 above for additional information.

**4.2 Bluebird.** Bluebird has an existing handhole on the right side near Sta 93+00 that falls within the proposed pavement. This handhole contains a through splice on their backbone fiber.

Bluebird and Lumen have plans to relocate their fiber to the south to clear signal base 1 for the Deeswood signal. Lumen's contractor will take the lead and install the conduits for both utilities from the west side of Mayfair to the east side of Deeswood. Once the conduit has been installed, Bluebird's contractor will install fiber in their new conduit. They anticipate it will take 30 days to install and cut over their fiber after the new conduit has been placed.

**4.3 Lumen.** The contractor is advised that Lumen's three conduits are in close proximity to Bluebird's two conduits at this location. Lumen has plans to relocate their conduit and fiber along with Bluebird's conduit between the west side of Mayfair to the east side of Deeswood back to the new south R/W line. The conduit installation will occur during the roadway construction to minimize disruption to the adjacent property owners. The contractor shall exercise caution when working over Lumen's active fiber. Any damage to Lumen's facilities caused by the contractor's actions shall be remedied solely at the contractor's expense.

**4.4 AT&T.** AT&T has an existing handhole in the southeast quadrant of Sunshine and Mayfair. This handhole will fall within the limits of the proposed curb ramp. AT&T intends to relocate this handhole south to a location just outside of the new curb ramp. AT&T intends to relocate this handhole during construction. The roadway contractor is advised that AT&T's contractor will need the south limits of the curb ramp staked so their contractor will know where to place the relocated handhole. The contractor will be responsible for any needed utility staking on this project. All cost for utility staking are to be included within the contractor's submitted lump sum cost for bid item 627-40.00, Contractor Furnished Surveying and Staking.

## **5.0 Deeswood/Ingram Mill Signal.**

### **5.1 City Utilities - Electric.**

**5.1.1 Primary Power.** City Utilities has multiple impacts to primary power at the Deeswood intersection. In the southwest quadrant, they have a guy pole and anchor supporting the bend on the three phase crossing of Sunshine. The existing guy pole and anchor fall within the limits of the new EB to SB right turn lane. CU will be setting a new guy pole and anchor back at the new R/W in the southwest quadrant. This new guy pole will also be the source for the secondary power to the new Type 2 Power Supply. In the northwest quadrant near Sta 99+13, CU has a pole supporting a dual three phase circuit with telecom upbuild. This pole falls within the new pavement for the U-turn. CU will be setting a new in-line pole approximately 63ft to the west to mitigate the impact as well as verifying the minimum vertical clearance is met. The impacted pole in the northwest quadrant also has a secondary power drop and a Mediacom service drop to 3265 E. Sunshine. Both of these drops will be relocated to CU's new in-line power pole. SpringNet, AT&T, and Mediacom will need to transfer their aerial lines to CU's new power pole. In the northeast quadrant, the short anchor on the power pole is in conflict with the ADA vertical height requirement for the new sidewalk. CU is evaluating the load calculations for the other anchors on this pole to see if the short anchor can be removed. If this anchor is found to be necessary, then CU will convert it to a sidewalk anchor. The contractor is advised that at the time of project advertisement, CU was still in the process of designing the primary power relocation. The engineering design can take 4 months to complete and another 3 months in queue for actual construction. Based on these timelines, the primary power relocations will not occur until late summer of 2027.

**5.1.2 Secondary Power.** The power source for the new Type 2 Power Supply will come from a secondary pedestal set next to CU's relocated guy pole in the southwest quadrant. The contract requirements for new power supplies are addressed in section 1.5 above. The secondary

pedestal is estimated to be approximately 37ft from the new Type 2 Power Supply. The roadway contractor shall provide and install the conduit and wire from the secondary pedestal to the new power supply. The contractor shall referend CU Drawing 95153 for the contracted scope of work. All costs for this additional conduit and wire shall be included in the contractor's submitted unit price for item 902-86.20 Power Supply Assembly, Type 2, per each.

**5.1.3 City Utilities Whiteway Lighting.** City Utilities has two lighting structures impacted by the proposed EB to SB right turn lane at Deeswood. As noted in section 4.1 above, CU intends to renew the lighting circuit on the south side of Sunshine between approximate Sta 91+00 to Sta 104+20. The contractor shall referend CU Drawing 95153 for the contracted scope of work. See section 1.4 above for additional information.

**5.2 AT&T.** AT&T has an existing handhole in the northeast quadrant of Sunshine and Deeswood. This handhole falls within the limits of the new sidewalk. AT&T will adjust the elevation of the handhole to match the final sidewalk grade during construction. The contractor shall notify AT&T a minimum of 3 weeks in advance of needing the adjustment. The contractor shall also be responsible for establishing the final grade for AT&T's contractor to make the adjustment.

**5.3 Bluebird and Lumen.** The parallel fiber installation noted in section 2.4 above runs along the south side of Sunshine at the Deeswood intersection. Recent locates indicate the conduit package falls within the excavation limits of the proposed signal base in the southwest quadrant (base 1). Both companies also have existing handholes that fall within the proposed pavement for the new EB to SB right turn lane. These are pass through handholes containing slack coils. Lumen is taking lead and relocating the conduit runs back to the new R/W for both Lumen and Bluebird. The conduit installation will occur during the roadway construction to minimize disruption to the adjacent property owners. Once the new conduit and handholes have been installed, both will install their respective fiber and perform the cutover. The contractor is advised that it can take Lumen 30 days to obtain approval for fiber cutover.

## **6.0 U-Turn Near Neighborhood Market.**

**6.1 Bluebird.** Bluebird has a handhole on the south side of Sunshine near Sta 126+84 that falls within the new sidewalk. Bluebird will adjust the elevation of the handhole to match the final sidewalk grade during construction. The contractor shall notify Bluebird a minimum of 3 weeks in advance of needing the adjustment. The contractor shall also be responsible for establishing the final grade for Bluebird's contractor to make the adjustment.

**6.2 City Utilities – Electric.** City Utilities has a three phase power line crossing Sunshine near Sta 129+60. The existing pole on the north side will be in conflict with the new U-turn pavement. CU will be relocating this crossing approximately 95ft to the west. New in-line poles will be set on both the north and south sides of Sunshine to support the power crossing. SpringNet, AT&T, and Mediacom will need to transfer their aerial facilities to CU's new power poles. The contractor is advised that at the time of project advertisement, CU was still in the process of designing the primary power relocation. The engineering design can take 4 months to complete and another 3 months in queue for actual construction. Based on these timelines, the primary power relocations will not occur until late summer of 2027.

**6.3 City Utilities – Gas and Water.** CU has a 16" DI water main and a 8" steel gas main running parallel to Sunshine on the north side of the roadway. Both facilities are in a private easement north of the original R/W line. The proposed roadway improvements include pavement widening to the north over both mains. CU has agreed to leave the mains in place since the impact is short

and the proposed grading is fill. Both of these mains are considered high profile facilities to CU's system. The contractor shall exercise extreme caution when working over the top of these active mains.

**7.0 Brandon Avenue.** CU Electric has a streetlight supported by a wood pole in the southwest quadrant. This pole falls within the limits of the pavement widening for the new turning radius. The contractor shall notify CU two days in advance of needing the existing pole removed. CU will reset the pole and luminaire behind the new curb and gutter after it has been installed by the roadway contractor.

I. Special Consideration of Change Orders and Value Engineering JSP-21-07

**1.0 Description.** Increased Federal Share has been approved by the FHWA for an innovative technology or practice. The Commission will receive an additional five percent Federal Share of the overall contract value due to innovations within the following pay item(s).

**1.1** The pay items listed in the table below are used at all traffic signal locations shown on the plans. The increased Federal Share shall only be used on the Pedestrian Hybrid Beacon (HAWK) signal.

| Pay Item Number | Pay Item Description                  | Innovation               |
|-----------------|---------------------------------------|--------------------------|
| 902-05.13       | Signal Head, Type 3B                  | Pedestrian Hybrid Beacon |
| 902-08.11       | Signal Head, Type 1S, Pedestrian      | Pedestrian Hybrid Beacon |
| 902-08.33       | SH – Flat Sheet – Signal Sign         | Pedestrian Hybrid Beacon |
| 902-08.34       | Signal Mounting Hardware              | Pedestrian Hybrid Beacon |
| 902-27.08       | Post, Signal 8 ft.                    | Pedestrian Hybrid Beacon |
| 902-32.30       | Post, Type C, 30 ft Arm               | Pedestrian Hybrid Beacon |
| 902-32.35       | Post, Type C, 35 ft. Arm              | Pedestrian Hybrid Beacon |
| 902-49.21       | Accessible Pedestrian Signal          | Pedestrian Hybrid Beacon |
| 902-52.00       | Conduit, 2 in., Trench w/ Tracer Wire | Pedestrian Hybrid Beacon |
| 902-53.00       | Conduit, 3 in., Trench w/ Tracer Wire | Pedestrian Hybrid Beacon |
| 902-73.00       | Conduit, 3 in., Pushed w/ Tracer Wire | Pedestrian Hybrid Beacon |
| 902-82.08       | Cable, 8 AWG 1 Conductor, Power       | Pedestrian Hybrid Beacon |
| 902-83.08       | Cable, 16 AWG 2 Conductor             | Pedestrian Hybrid Beacon |
| 902-83.10       | Cable, 16 AWG 5 Conductor             | Pedestrian Hybrid Beacon |
| 902-83.11       | Cable, 16 AWG 7 Conductor             | Pedestrian Hybrid Beacon |
| 902-86.20       | Power Supply Assembly, Type 2         | Pedestrian Hybrid Beacon |
| 902-88.20       | Pull Box, Concrete, Standard          | Pedestrian Hybrid Beacon |
| 902-88.21       | Pull Box, Concrete, Double, Type A    | Pedestrian Hybrid Beacon |
| 902-91.00       | Base, Concrete                        | Pedestrian Hybrid Beacon |
| 902-99.02       | Misc. 2070 Controller                 | Pedestrian Hybrid Beacon |
| 902-99.02       | ITS Cabinet                           | Pedestrian Hybrid Beacon |
| 910-82.06       | Cable, 6 AWG, 1 Conductor, Power      | Pedestrian Hybrid Beacon |
| 910-88.20       | Pull Box, Concrete, Standard (ITS)    | Pedestrian Hybrid Beacon |
| 910-99.02       | 48 Port Fiber Distribution Unit       | Pedestrian Hybrid Beacon |

|           |                                           |                          |
|-----------|-------------------------------------------|--------------------------|
| 910-99.02 | Furnishing and Installing Ethernet Switch | Pedestrian Hybrid Beacon |
| 910-99.03 | Ethernet Cable (CAT6)                     | Pedestrian Hybrid Beacon |
| 910-99.03 | Fiber Optic Cable, 24-Fiber, Single Mode  | Pedestrian Hybrid Beacon |

Due to the increased Federal Share, the project components related to the innovation(s) described above must be constructed with the materials, quantities, methods and innovations as shown on the project plans and specifications. If the contractor requests materials, quantities, methods or innovations other than those included in the plans and specifications, the request must be reviewed and approved by the Commission and FHWA. Approved changes to the innovation items above shall be at no additional cost to the Commission and shall not increase the contract time.

**2.0 Special Consideration of Change Orders and Value Engineering Change Proposals (VECP).** Change ordering and/or value engineering the pay item(s) listed in section 1.0 jeopardize the ability for the Commission to receive an additional Federal Share for the overall contract value. Special consideration should be given to the change order value for removing or modifying such item(s) from the contract ensuring the benefit outweighs the cost.

**3.0 Contacting Financial Services.** If it is determined that the proposed change order and/or VECP outweighs the additional overall five percent Federal Share value, the Engineer shall notify the MoDOT project manager.

#### J. Quality Management NJSP-15-22

**1.0 Quality Management.** The contractor shall provide Quality Management as specified herein to ensure the project work and materials meets or exceeds all contract requirements.

**1.1** The contractor shall provide Quality Control (QC) of the work and material, as specified herein, to ensure all work and material is in compliance with contract requirements. QC staff shall perform and document all inspection and testing. The QC inspectors and testers may be employed by the contractor, sub-contractor, or a qualified professional service provided by the contractor.

**1.2** The engineer will provide Quality Assurance (QA) inspection. The role of QA is to verify the performance of QC and provide confidence that the product will satisfy given requirements for quality.

**1.3** The contractor shall designate a person to serve as the project Quality Manager (QM). The QM shall be knowledgeable of standard testing and inspection procedures for highway and bridge construction, including a thorough understanding of the Missouri Standard Specifications. The QM shall be responsible for the implementation and execution of the Quality Management Plan and shall oversee all QC responsibilities, including all sub-contract work. The QM shall be the primary point of contact for all quality related issues and responsibilities, and shall ensure qualified QC technicians and inspectors are assigned to all work activities. The QM should be separate from the manager of the work activities to effectively manage a QC program.

**1.4** Any QC personnel determined in sole discretion of the engineer to be incompetent, derelict in their duties, or dishonest, shall at a minimum be removed from the project. Further investigation

will follow with a stop work notification to be issued until the contractor submits a corrective action report that meets the approval of the engineer.

**2.0 Quality Management Plan.** The contractor shall develop, implement and maintain a Quality Management Plan (QMP) that will ensure the project quality meets or exceeds all contract requirements, and provides a record for acceptance of the work and material. A sample QMP, which shows minimum requirements, is provided on the MoDOT website at: [www.modot.org/quality](http://www.modot.org/quality).

**2.1** The QMP shall address all QC inspection and testing requirements of the work as described herein. A draft QMP shall be submitted to the Resident Engineer for review at least two weeks prior to the pre-construction conference. An approved QMP is required at least two weeks prior to the start of work, unless otherwise allowed by the engineer. Physical work on the project shall not begin prior to approval of the QMP by the engineer.

**2.2** The approved QMP shall be considered a contract document and any revisions to the QMP will require approval from the engineer.

**2.3** The following items shall be included in the Quality Management Plan:

- a) Organizational structure of the contractor's project management, production staff, and QC staff, specific to this project.
- b) Name, qualifications and job duties of the Quality Manager.
- c) A list of all certified QC testers who will perform QC duties on the project, including sub-contract work, and the tests in which they are certified.
- d) A list of all QC inspectors who will perform QC inspection duties on the project, including sub-contract work, and the areas of inspection that they will be assigned.
- e) A procedure for verifying documentation is accurate and complete as outlined in Section 3.
- f) A procedure describing QC Inspections as outlined in Section 4.
- g) A procedure describing QC Testing, as outlined in Section 5, including a job specific Inspection and Test Plan (ITP).
- h) A procedure describing Material Receiving as outlined in Section 6.
- i) A list of Hold Points that are not included in the checklist forms, as outlined in Section 8.
- j) A procedure for documenting and resolving Non-Conforming work as outlined in Section 9.
- k) A procedure for tracking and documenting revisions to the QMP.
- l) A list of any approved changes to the Standard Specifications or ITP, including a reference to the corresponding change order.

- m) Format for the Weekly Schedule and Work Plans as outlined in Section 10, including a list of activities that will require pre-activity meetings.

**3.0 Project Documentation.** The contractor shall establish a Document Control Procedure for producing and uploading the required Quality Management documents to a MoDOT-provided server. The document management software used by MoDOT is Microsoft SharePoint®. Contractors do not need to purchase Microsoft SharePoint®, however, it is recommended that new users acquire some basic training to better understand how to use this software. MoDOT does not provide the software training, but there are several online vendors who do. Contractors are required to use Microsoft Excel® and Microsoft Word® with some documents.

**3.1** The contractor shall utilize the file structure and file naming convention provided by MoDOT. A sample file structure is available on the MoDOT website.

**3.2** Documents (standard forms, reports, and checklists) referenced throughout this provision are considered the minimum documentation required. They shall be obtained from MoDOT at the following web address: [www.modot.org/quality](http://www.modot.org/quality). The documents provided by MoDOT are required to be used in the original format, unless otherwise approved by the engineer. Any alteration to these forms shall be approved by the engineer.

**3.3** Timely submittal of the required documents to the MoDOT document storage location is essential to ensure payment can be processed for the completed work. Submittal of the documents is required within 12 hours of the work shift that the work was performed, or on a document-specific schedule approved by the engineer and included in the QMP.

**3.4** The contractor shall establish a verification procedure that ensures all required documents are submitted to the engineer within the specified time, and prior to the end of each pay period for the work that was completed during that period. Payment will not be made for work that does not include all required documents. Minimum documents that might be required prior to payment include: Test Reports, Inspection Checklists, Materials Receiving Reports, and Daily Inspection Reports.

**3.5** The contractor shall perform an audit at project closeout to ensure the final collection of documents is accurate and complete.

**4.0 Quality Control Inspections.** The QMP shall identify a procedure for performing QC inspections. QC inspections shall be performed for all project activities to ensure the work is in compliance with the contract, plans and specifications.

**4.1** The QM shall identify the QC inspectors assigned to each work activity. The QC inspectors shall inspect the work to ensure the work is completed in accordance with the plans and specifications, and shall document the inspection by completing the required inspection checklists, forms, and reports provided by MoDOT. Depending on the type of work, the checklists may be necessary daily, or they may follow a progressive work process. The frequency of each checklist shall be stated in the QMP. The contractor may propose alternate versions of checklists that are more specific to the work.

**4.2** A Daily Inspection Report (DIR) is required to document pertinent activity on the project each day. This report shall include a detailed diary that describes the work performed as well as observations made by the inspection staff regarding quality control. The report shall include other items such as weather conditions, location of work, installed quantities, tests performed, and a

list of all subcontractors that performed work on that date. The report shall include the full name of the responsible person who filled out the report and shall be digitally signed by an authorized contractor representative.

**4.3** External fabrication of materials does not require further QC inspection if the product is currently under MoDOT inspection or an approved QC/QA program. QC inspection and testing required in the production of concrete for the project shall be the responsibility of the contractor.

**4.4** The contractor shall measure, and document on the DIR, the quantity for all items of work that require measurement. Any calculations necessary to support the measurement shall be included with the documentation. The engineer will verify the measurements prior to final payment.

**5.0 Quality Control Testing.** The QMP shall identify a procedure for QC testing. The contractor shall perform testing of the work at the frequency specified in the Inspection and Test Plan (ITP).

**5.1** MoDOT will provide a standard ITP and the contractor shall modify it to include only the items of work in the contract, including adding any Job Special Provision items. The standard ITP is available on the MoDOT website at [www.modot.org/quality](http://www.modot.org/quality). The contractor shall not change the specifications, testing procedures, or the testing frequencies, from the standard ITP without approval by the engineer and issuance of a change order.

**5.2** Test results shall be recorded on the standard test reports provided by the engineer, or in a format approved by the engineer. Any test data shall be immediately provided to the engineer upon request at any time, including prior to the submission of the test report.

**5.3** The contractor shall ensure that all personnel who perform sampling and/or testing are certified by the MoDOT Technician Certification Program or a certification program that has been approved by MoDOT for the sampling and testing they perform.

**5.4** If necessary, an independent third party will be used to resolve any significant discrepancies between QC and QA test results. All dispute resolution testing shall be performed by a laboratory that is accredited in the AASHTO Accreditation Program in the area of the test performed. The contractor shall be responsible for the cost to employ the third party laboratory if the third party test verifies that the QA test was accurate. The Commission shall be responsible for the cost if the third party test verifies that the QC test was accurate.

**6.0 Material Receiving.** The QMP shall identify a procedure for performing material receiving. Standard material receiving forms will be provided by the engineer.

**6.1** The procedure shall address inspections for all material delivered to the site (excluding testable material such as concrete, asphalt, aggregate, etc.) for general condition of the material at the time it is delivered. The material receiving procedure shall record markings and accompanying documentation indicating the material is MoDOT accepted material (MoDOT-OK Stamp, PAL tags, material certifications, etc.).

**6.2** All required material documentation must be present at the time of delivery. If the material is not MoDOT accepted, the contractor shall notify the engineer immediately and shall not incorporate the material into the work.



**7.0 Quality Assurance.** The engineer will perform Quality Assurance inspection and testing (QA) to verify the performance of QC inspection and testing. The frequency of the QA testing will be as shown in the ITP, but may be more frequent at the discretion of the engineer. The engineer will record the results of the QA testing and inspection and will inform the contractor of any known discrepancies.

**7.1** QA is responsible for verifying the accuracy of the final quantity of all pay items in the contract. This includes taking measurements on items that require measurement and other items that are found to have appreciable errors.

**7.2** QA inspection and test results shall not be used as a substitute for QC inspection and testing.

**7.3** QA will be available for Hold Point inspections at the times planned in the Weekly Schedule. The inspections may be re-scheduled as needed, but a minimum 24-hour advance notification from the contractor is required unless otherwise approved by the engineer.

**8.0 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 the succeeding work depends on a QA review of the preceding work before work can continue.

**8.1** A list of minimum Hold Points will be provided by the engineer and shall be included in the QMP. The engineer may make changes to the Hold Point list at any time.

**8.2** Prior to all Hold Point inspections, QC shall provide the engineer with the Daily Inspection Reports, Inspection Checklists, Test Reports, and Material Receiving Reports for the work performed leading up to the Hold Point. 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.

**9.0 Non-Conformance Reporting.** Non-conformance reports shall be issued by the contractor for work that does not meet the contract requirements. Non-conforming work includes work, testing, materials and processes that do not meet contract requirements. The contractor shall establish a procedure for identifying and resolving non-conforming work as well as tracking the status of the reports.

**9.1** Contractor QC staff or production staff should identify non-conforming work and document the details on the Non-Conformance Report form provided by MoDOT. QA staff may also initiate a non-conformance report.

**9.2** In-progress work that does not meet the contract requirements may not require a non-conformance report if production staff is aware of the issue and corrects the problem during production. QC or QA may issue a non-conformance report for in-progress work when documentation of the deficiency is considered beneficial to the project record.

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

**9.4** For recurring non-conformance work of the same or similar nature, a written Corrective Action Request will be issued by QC or QA. The contractor shall then establish a procedure for tracking the corrective action from issuance of the request to implementation of the solution. Approval

from the engineer is required prior to implementation of the proposed corrective action. The contractor shall notify the engineer after the approved corrective action has been implemented.

**10.0 Work Planning and Scheduling.** The contractor shall include Quality Management in all aspects of the work planning and scheduling. This shall include providing a Weekly Schedule, a Work Plan for each work activity, and holding pre-activity meetings for each new activity.

**10.1** A Weekly Schedule shall be provided to the engineer each week that outlines the planned project activities for the following two-week period. This schedule shall include all planned work, identification of all new activities, traffic control events, and requested Hold Point inspections for the period. Planned quantity of materials, along with delivery dates should also be included in the schedule.

**10.2** A Work Plan shall be submitted to the engineer at least one week prior to the pre-activity meeting. The Work Plan shall include the following: a safety plan, list of materials to be used, work sequence, defined responsibilities for QC testing and inspection personnel, and stages of work that will require Hold Point inspections.

**10.3** A pre-activity meeting is required prior to the start of each new activity. The purpose of this meeting is to discuss details of the Work Plan and schedule, including all safety precautions. Those present at the meeting shall include: the production supervisor for the activity, the Quality Manager, QC inspection and testing staff, and QA. The Quality Manager will review the defined responsibilities for QC testing and inspection personnel and will address any quality issues with the production staff. Attendees may join the meeting in person or by phone or video conference.

**11.0 Basis of Payment.** Payment for all costs associated with developing, implementing and maintaining the Quality Management Plan, providing Quality Control inspection and testing, and all other costs associated with this provision, will be considered included in the unit price of each contract item. No direct pay will be made for this provision.

K. 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:

[www.modot.org/business/contractor\\_resources/forms.htm](http://www.modot.org/business/contractor_resources/forms.htm)

**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.

L. ADA Material Testing Frequency Modifications JSP-23-01

**1.0 Description.** This provision revises the Inspection and Testing Plan (ITP) for the construction of ADA compliant features to better match the nature of the work. The Quality Control (QC) testing frequency for the Sections identified below are to be revised as specified.

**2.0 Compaction Test on Base Rock Under Sidewalk, Curb Ramps and Paved Approaches.** (Revises ITP Sec 304.3.4) The required test frequency will be one per 600 tons.

**3.0 Gradation Test on Base Rock Under Sidewalk, Curb Ramps and Paved Approaches.** (Revises ITP Sec 304.4.1) The required frequency will be one per 500 tons.

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

**5.0 Concrete Median, Median Strip, Sidewalk, Curb Ramps, and Curb.** (Revises ITP Sec 608) The required frequency will be 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.** (ITP Sec 608) The required testing of one test from the first truckload per day and each 100 CUYDs for air and slump will remain per ITP. 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 ITP 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 requirements.

M. Truck Mounted Attenuator (TMA) for Stationary Activities JSP-23-04

**1.0 Description.** Provide and maintain Truck Mounted Attenuators (TMA) in accordance with Sec 612 and as specified herein.

**2.0 Construction Requirements.** Truck Mounted Attenuators (TMA) shall be used for the work activities indicated in the plans or specified herein.

**2.1 8" Concrete Median Strip and Island Construction** - any lane closure required for constructing the center median or any of the islands.

**2.2 Traffic Signal Equipment Installation** - Any lane closure required for installing any traffic signal equipment within the project limits.

**2.3 Pavement Marking** – any lane closure required for installing pavement marking within the entire project limits.

**2.4 Right Turn Lane Construction** - any lane closure required for constructing the right turn lane at Enterprise Ave. or Ingram Mill Road.

**2.5 U-turn Lane Construction** - any lane closure required for constructing the U-turns at Deeswood Ave, at Mayfair Ave. and west of Blackman Road at East Sunshine Church of Christ (Parcel 9).

**2.6 Driveway Construction and Driveway Removals** - any lane closure required for constructing or removing driveways.

**2.7 Street Approach Construction** - any lane closure required for constructing new street approaches including Brandon Ave., Oakmont Ave., and Washita St.

**3.0 Method of Measurement.** No measurement will be made for Truck Mounted Attenuators (TMA).

**4.0 Basis of Payment.** Delete Sec 612.5.1 and substitute with the following:

**612.5.1** No payment will be made for truck mounted attenuators (TMAs) used in mobile operations or for any TMAs designated as optional.

**612.5.1.1** Payment for TMAs required for stationary work activities will be paid for at the contract unit bid price for Item 612-30.01, Truck Mounted Attenuator (TMA), per lump sum. The lump sum payment includes all work activities that require a TMA, regardless of the number of deployments, relocations, or length of time utilized. No payment will be made for repair or replacement of damaged TMAs.

N. ADA Compliant Moveable Barricade

**1.0 Description.** The work shall consist of providing moveable barricades to satisfy the requirements of the pedestrian traffic control plans as shown in the bidding documents. The contractor will be responsible for moving the pedestrian barricades to coincide with their planned order of work.

**2.0 Construction Requirements.** The contractor shall use a moveable barricade that meets the requirements as established by the ADA. The pedestrian barricades shall be of self-supporting type having a minimum length of 6 feet per unit. The face of the barricade shall not extend into adjacent sidewalk considered open for pedestrian use. The contractor will be responsible for setting and maintaining the pedestrian barricades until all the proposed improvements have been constructed.

**3.0 Method of Measurement.** Measurement for ADA Compliant Moveable Barricade will be made per each for each 6 feet (min.) unit provided.

**4.0 Basis of Payment.** Payment for all work necessary to fulfill the requirements noted above will be considered completely covered in the contract unit price for Pay Item No. 616-99.02 ADA Compliant Moveable Barricade, per each. No direct payment will be made for any necessary relocation of the ADA Compliant Moveable Barricade.

O. Linear Grading for ADA Facilities - SW

**1.0 Description.** This work shall consist of altering the existing roadside features to the required grade and cross sections shown on the plans (if applicable), or to comply with typical sections, running slopes, drop-off and side-slope standards, consistent with the guidelines set forth in the Americans with Disabilities Act (ADA). This work shall be in accordance with Sections 202 and 207 and accompanying provisions except as modified herein.

**2.0 Construction Requirements.** The roadside shall be brought to the required grade and cross section as established in Section 1.0 of this provision, to a uniform appearance, free of sharp breaks or humps. Minor deviations will be allowed, to take advantage of favorable topography, as approved by the engineer.

**2.1** The contractor shall remove all existing roadside improvements necessary to facilitate the new sidewalk and curb ramp construction, along with any other roadside removal items at, or adjacent to the pedestrian pathway, as noted in the plans or as approved by the engineer. This shall include the removal and/or saw cutting at existing raised islands or median strips to construct the pedestrian pathway. The contractor shall pay special care to existing utility facilities to be used in place or relocated by others.

**2.2** The contractor shall be responsible for all excavation and embankment work necessary to facilitate construction of new ADA compliant facilities; normally consisting of subgrade and subsequent finished grading for sidewalks, curbs, curb ramps; and may include miscellaneous grading work for items such as ditches, entrances, paved approaches, driveways and pipes, at or adjacent to proposed new sidewalk facilities.

**2.3** By this provision, it may be necessary to excavate, stockpile, and haul some material within the project limits. Due to staging and/or Right-of-Way constraints, it may be necessary to waste unusable material off Right-of-Way, and/or haul a replacement volume of material back to achieve the desired grades.

**2.4** All removals of Portland or Asphaltic Concrete performed under this provision will require saw-cutting a neat/clean edge along the removal lines at no direct pay, unless otherwise provided for in the contract.

**3.0 Method of Measurement.** Measurement of Linear Grading for ADA Facilities will be made along the length of the new sidewalk and/or curb ramp installed, along each side of the roadway where sidewalk work is to be performed, and along the centerline length of each driveway, entrance, or paved approach as shown on the plans. Measurement will be made to the nearest 1-foot for each sidewalk work area, totaled, and paid to the nearest 1-foot for final pay. Final field measurement will not be required except where appreciable errors are found, or authorized changes have been made.

**4.0 Basis of Payment.** The accepted quantities of Linear Grading for ADA Facilities will be paid for at the contract unit price for item 207-99.03, Linear Grading for ADA Facilities, Linear Foot,

and will be considered as full compensation for all labor, equipment, material, waste fees, disposal agreements, material acquisition, or other construction costs involved to complete the described work.

**4.1** No direct payment will be made for “REMOVAL OF IMPROVEMENTS” associated with the removal and disposal of sidewalks, curbs, curb ramps, entrances, and other incidentals required for construction of the new sidewalk and/or curb ramps.

P. Curb Ramps and Sidewalk – SW

**1.0 Description.** Construction of concrete curbs, aprons, curb ramps, transition areas, sidewalk and landings shall be in accordance with applicable portions of Sections 608 & 609 of the Standard Specification and Standard Plans for Highway Construction 608.10, as shown on the plans, and meet ADA requirements.

**2.0 Construction Requirements.** This work shall include, but is not limited to, sidewalk construction including landings, joint construction, aggregate base, compaction, apron modifications, transition area, curb ramp construction, Type S Curb or Type A Curb installation (as required), tie bars or dowel bars (as required), clean-up, etc. for each location shown on the plans.

The following requirements shall be applicable to construction of this project:

- Existing curb, curb and gutter, sidewalk, shoulders, etc. that are adjacent to a designated curb ramp and/or sidewalk improvement area that is damaged during construction shall be replaced/repared to match existing materials and condition.
- Variable height curb along the roadside may be constructed monolithic or separate depending on construction operations. Integral curb shall be doweled to the existing gutter or pavement. - Integral or Type S-curb shall be used along the existing right-of-way when constructing curb ramps as shown on the plans. The cost of the curb is included in pay limits of the curb ramp.
- The transition area shall be 8” thick and tied to the existing roadway pavement and existing paved approach or sidewalk it is matching.
- Curing compound for all concrete construction shall be a clear or translucent color. The white pigmented option or other colored compound will not be allowed.
- Adjacent grass areas, landscaping, irrigation systems (lines, sprinkler heads, control boxes), pavement, etc. disturbed by curb ramp or sidewalk construction shall be repaired or replaced to match or exceed existing conditions.
- Sod quantities are included for adjacent areas. More or less sod may be required depending on actual field conditions.

**3.0 Method of Measurement.** Curb ramps and concrete sidewalk will be measured to the nearest 1/10 square yard. Measurement of incidental items required to complete all aspects of construction for the above noted items at each new curb ramp and sidewalk location will not be made individually unless specified elsewhere in the contract.

**4.0 Basis of Payment.** All costs incurred by the contractor by reason of compliance to satisfy the above requirements will be considered incidental to and completely covered by the contract unit price for each of the pay items within the contract.

Q. Pigmenting and Texturing Concrete

**1.0 Description.** This work shall consist of pigmenting and texturing the concrete with an Ashlar Stone pattern for the 8 in. concrete median strip and intersection islands as shown in the plans.

**2.0 Materials.** The contractor shall submit to the engineer, setting forth the brand name, designation (if any), composition and general description of the material to be used in the process of pigmenting.

**2.0.1 Stamp Manufacturers.** The following contains a list of manufacturers having acceptable products meeting the Ashlar Stone stamp pattern. The contractor may select one of the products from the list or has the option to submit a different product to the engineer for review and approval. The contractor shall use only one stamp pattern for the entire project.

English Ashlar Concrete Stamp by Calico Construction Products  
English Rivenstone by Stamped Concrete Supplies  
Ashlar Slate Concrete Stamp by GlobMarble  
BC Ashlar Concrete Stamp by Contractor Source  
Ashlar Stone Stamp by Pacific Concrete Images  
Ashlar Slate Stamp by Butterfield Color  
Three Rivers Ashlar Stamp by Expressions LTD

**3.0 Construction Requirements.** This work shall be done in accordance with the requirements of Section 502 and 608.

**3.1 Pigment Color.** The pigment shall be red in color, as approved by the engineer and shall be free from oil, grease, dirt and nonferrous particles and shall cause no adverse effects to the concrete mix. The manufacturer shall guarantee that all materials used in the pigmenting process will have no adverse effects on the strength and overall integrity of the concrete.

**3.2 Material.** Pigmenting of the concrete shall be as described in Sec 1056.10 and shall be mixed into the concrete prior to being placed for the concrete median strips or intersection islands as shown in the plans.

**3.3 Sample.** A minimum of two working days prior to the placement of the pigmented textured concrete, the contractor shall submit a sample pavement section to the engineer. The sample shall be constructed using the identical process for pigmenting and texturing the permanent pavement. If, in the opinion of the engineer, changes need to be made to the texturing or color, a new sample shall be submitted before final approval can be given. The minimum size sample shall be 4 feet by 4 feet.

**3.4 Texturing.** After surface irregularities have been removed, the concrete shall be given a uniform surface finish resembling the Ashlar Stone pattern used on the intersection islands at Route 13 (Kansas Expressway) and Walnut Lawn. The method by which the surface is textured is left to the discretion of the contractor. A stamp or roller device is preferred to maintain



consistency. Hand texturing will be permitted in irregular areas where, in the opinion of the engineer, a stamp or roller device would no longer be beneficial or would not give a satisfactory appearance to the surface of the concrete. Prior to placing the concrete, the contractor and engineer shall review all perceived areas where hand texturing may be necessary. The engineer shall make all efforts to minimize the amount of area to be hand textured.

**3.4.1.** All median strips and intersection islands shall have a 6-inch smooth edge on the top surface outlining the island or median strip for pavement marking. Tar Paper shall be required around the border of the form so that the surrounding pavement will not be marred or stained.

**4.0 Method of Measurement.** Concrete areas shall be computed to the nearest 0.1 square yard.

**5.0 Basis of Payment.** All costs for complying with this special provision shall be considered completely covered by the Pay Item No. 608-99.05, Pigmenting and Texturing Concrete, per 0.1 SY.

R. Optional Pavements 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 grading shown on the plans was designed for the thicker pavement option. For projects with grading in the contract, there will be no adjustment of the earthwork quantities due to adjusting the roadway subgrade for optional pavements.

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

**2.5** 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, Sunshine Optional Pavement, per square yard for work done on Route D (Sunshine St.) and at the contract unit bid price for Item 401-99.05, Radii Improvements Optional Pavement, per square yard for the radii improvements at Brandon Ave., Oakmont Ave., and Washita St.

**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.

S. Signal Controller

**1.0 Description.** This work shall consist of providing and installing a new 2070 controller with cabinet at the intersections shown on the plans.

**1.0 Material Requirements.** The new controllers installed with this project shall consist of ATC eX 2070 controllers with OMNI-eX software as manufactured by McCain, Inc. placed inside a 332 cabinet.

**2.1** The contractor shall be responsible for providing and installing all necessary items to make the new signal controllers operational. This includes but is not limited to the 2070 controller, the OMNI-eX software, and the 332 cabinet. The engineer will provide the existing cycle lengths, but the contractor shall ultimately be responsible for programming the timings into the new controllers.

**3.0 Method of Measurement.** Method of measurement will be made per each controller installed by the contractor and acceptable by the engineer.

**4.0 Basis of Payment.** Accepted signal controllers will be paid for at the contract unit price for item 902-99.02, Misc. 2070 Controller, per each.

T. Signal Detection Disconnection

**1.0 Description.** The contractor shall contact the Traffic Management Center to coordinate a new signal timing at a minimum of two (2) working days prior to the disconnection of the signal's detection capabilities or prior to the milling of an approach with inductive loop detection.

**2.0 Contact Information.**

Melanie Belote, Traffic Studies Specialist  
Southwest District Traffic Management Center  
Telephone Number: 417-829-8056  
Cell Number: 417-689-3783  
Email: [Melanie.Belote@modot.mo.gov](mailto:Melanie.Belote@modot.mo.gov)

**3.0 Basis of Payment.** No direct pay will be made to the contractor to recover the cost or time required to fulfill the above provision.

U. Accessible Pedestrian Pushbutton Connectivity

**1.0 Description.** Connectivity to all accessible pedestrian pushbuttons shall be required for all signalized pedestrian crosswalks at all intersections as shown in the plans.

**2.0 Construction Requirements.** In addition to Sec 902, all accessible pedestrian pushbutton systems shall have a Bluetooth interface or other hands-free capability and be password protected. Programming of the APS buttons shall be accessible through a field service application available on both iOS and Android platforms.

**3.0 Equipment requirements.** The accessible pedestrian pushbutton system and its components, in form and functionality, shall meet or exceed the requirements of the following documents and standards:

- 2009 MUTCD, Section 4E.09 – 4E.13
- NEMA 250 – 4X
- NEMA TS1, TS2, TS4, Type 170, Type 2070

**4.0 Documentation and Support.** The contractor shall provide two (2) copies of the operation and maintenance manuals for each installed system.

**5.0 Method of Measurement.** No measurement providing connectivity will be made.

**6.0 Basis of Payment.** No direct payment for providing connectivity will be made. Payment for all work necessary to fulfill the requirements above will be considered completely covered in the contract unit price for Pay Item No. 902-49.21, Accessible Pedestrian Signal, per each.

V. Contractor Furnished, Contractor Installed Radar Detection System

**1.0 Description.** This work shall consist of providing radar detection for all traffic signal installations. The radar detection shall be in accordance with the standard specifications and installed to provide detection at locations as shown on the plans or as directed by the engineer in accordance with Sec 902.

**2.0 Equipment.** Radar equipment must meet or exceed all the following requirements.

- (a) Equipment must be FCC certified.
- (b) Equipment must meet all NEMA TS2-2003 specifications for traffic control equipment.
- (c) Each radar unit must be composed of multiple sensors to establish two-dimensional coverage.
- (d) Radar Detection must be compatible with SDLC inputs.

**3.0 Construction Requirements.** The contractor shall be responsible for providing and installing all necessary items to make the new radar detection system operational with stop bar presence detection and count detection for each lane of travel. Input BIU 9 shall be used for presence detector inputs according to the following chart.

| Vehicle Detection Assignments |       |    |          |            |      |
|-------------------------------|-------|----|----------|------------|------|
| PRESENCE DETECTION            | BIU   | IO | Detector | Call Phase | Mvmt |
|                               | BIU 9 | 1  | 1        | 1          | SBL  |
|                               |       | 2  | 2        | 2          | NBT  |
|                               |       | 3  | 3        | 3          | EBL  |
|                               |       | 4  | 4        | 4          | WBT  |
|                               |       | 5  | 5        | 5          | NBL  |
|                               |       | 6  | 6        | 6          | SBT  |
|                               |       | 7  | 7        | 7          | WBL  |
|                               |       | 8  | 8        | 8          | EBT  |
|                               |       | 9  | 9        |            |      |
|                               |       | 10 | 10       | 2          | NBR* |
|                               |       | 11 | 11       |            |      |
|                               |       | 12 | 12       | 4          | WBR* |
|                               |       | 13 | 13       |            |      |
|                               |       | 14 | 14       | 6          | SBR* |
|                               |       | 15 | 15       |            |      |
|                               |       | 16 | 16       | 8          | EBR* |

\*Right turn presence detection only used if the RT lane is signalized

BIU 10 and 11 shall be used for count detector inputs according to the following chart.

| Vehicle Detection Assignments |        |    |          |            |       |
|-------------------------------|--------|----|----------|------------|-------|
| COUNT DETECTION               | BIU    | IO | Detector | Call Phase | Lane  |
|                               | BIU 10 | 1  | 17       | 1          | SBL 1 |
|                               |        | 2  | 18       | 1          | SBL 2 |
|                               |        | 3  | 19       | 1          | SBL 3 |
|                               |        | 4  | 20       | 2          | NBT 1 |
|                               |        | 5  | 21       | 2          | NBT 2 |
|                               |        | 6  | 22       | 2          | NBT 3 |
|                               |        | 7  | 23       | 2          | NBT 4 |
|                               |        | 8  | 24       | 2          | NBR 1 |
|                               |        | 9  | 25       | 3          | EBL 1 |
|                               |        | 10 | 26       | 3          | EBL 2 |
|                               |        | 11 | 27       | 3          | EBL 3 |
|                               |        | 12 | 28       | 4          | WBT 1 |
|                               |        | 13 | 29       | 4          | WBT 2 |

|  |       |    |    |   |       |
|--|-------|----|----|---|-------|
|  |       | 14 | 30 | 4 | WBT 3 |
|  |       | 15 | 31 | 4 | WBT 4 |
|  |       | 16 | 32 | 4 | WBR 1 |
|  | BIU11 | 1  | 33 | 5 | NBL 1 |
|  |       | 2  | 34 | 5 | NBL 2 |
|  |       | 3  | 35 | 5 | NBL 3 |
|  |       | 4  | 36 | 6 | SBT 1 |
|  |       | 5  | 37 | 6 | SBT 2 |
|  |       | 6  | 38 | 6 | SBT 3 |
|  |       | 7  | 39 | 6 | SBT 4 |
|  |       | 8  | 40 | 6 | SBR 1 |
|  |       | 9  | 41 | 7 | WBL 1 |
|  |       | 10 | 42 | 7 | WBL 2 |
|  |       | 11 | 43 | 7 | WBL 3 |
|  |       | 12 | 44 | 8 | EBT 1 |
|  |       | 13 | 45 | 8 | EBT 2 |
|  |       | 14 | 46 | 8 | EBT 3 |
|  |       | 15 | 47 | 8 | EBT 4 |
|  |       | 16 | 48 | 8 | EBR 1 |

**4.0 Method of Measurement.** Method of measurement will be per intersection, complete in place including all necessary incidental items to complete the work. An intersection is defined as all legs in each direction including all lanes on each leg of the intersection.

**5.0 Basis of Payment.** Payment for the installation of the radar detection system will be completely covered by the contract unit price for Pay Item No. 902-99.02, Contractor Furnished, Contractor Installed Radar Detection System, per each.

W. Flashing Yellow Arrow Implementation Details

**1.0 Description.** This project includes the implementation of flashing yellow arrow (FYA) signals at various intersections as shown on the plans.

**2.0 Construction Requirements.** The contractor shall follow the guidance below when implementing the Flashing Yellow Arrow.

**2.1** Output file assignments for FYA compact mode in the 332 signal control cabinet are depicted below.

| Type 170 Output File Assignments for Flashing Yellow Left Turn Applications |           |           |            |            |            |             | Monitor |
|-----------------------------------------------------------------------------|-----------|-----------|------------|------------|------------|-------------|---------|
|                                                                             | SW 1/PH 1 | SW 2/PH 2 | SW 3/2 PED | SW 4/PH 3  | SW 5/PH 4  | SW 6/4 PED  |         |
| FTR1                                                                        | RL        | R         | 2 DW       | RL         | R          | 4 DW        |         |
| FTR2                                                                        | YL        | Y         | PH 1 L     | YL         | Y          | PH 3 L      |         |
|                                                                             | FYL       | G         | 2 W        | FYL        | G          | 4 W         |         |
| FTR3                                                                        | SW 7/PH 5 | SW 8/PH 6 | SW 9/6 PED | SW 10/PH 7 | SW 11/PH 8 | SW 12/8 PED |         |
|                                                                             | RL        | R         | 6 DW       | RL         | R          | 8 DW        |         |
| FTR4                                                                        | YL        | Y         | PH 5 L     | YL         | Y          | PH 7 L      |         |
|                                                                             | FYL       | G         | 6 W        | FYL        | G          | 8 W         |         |

**2.2** Any and all required cabinet modules or components to make the Flashing Yellow Arrow function properly shall be supplied and installed by the contractor. This includes, but is not limited to, load switches, detector cards and loading resistors.

**2.3** The contractor shall notify the Commission's representative listed below one (1) week prior to the desired implementation to obtain the required controller timing and data changes.

Melanie Belote  
Senior Traffic Studies Specialist  
Phone 417-689-3783  
Email: [Melanie.belote@modot.mo.gov](mailto:Melanie.belote@modot.mo.gov)

**2.4** Unused load switch outputs may need to be wired to a loading resistor to satisfy conflict monitor voltage requirements. A 1500 ohm, 25W resistor shall be used.

**2.5** Red "flash color" cabinet programming plugs shall be installed for all new or modified left turn phases.

**2.6** The contractor shall follow the appropriate conflict monitor unit manual to properly configure and implement the flashing yellow arrow and ensure the traffic signals/phases are safely monitored. Conflict monitors on this project shall be Eberle Design, Inc( EDI), Model 2010ECLip. Website for EDI: <https://www.editraffic.com/about-us>

**3.0 Basis of Payment.** No direct payment will be made to the contractor for all costs incurred with compliance of this provision. All equipment and labor necessary for the work described will be considered incidental to and completely covered by other pay items provided in the contract.

#### X. Ethernet Switch

**1.0 Description.** The proposed locations for Ethernet Switch installation are as follows and as shown on the plans.

| Route D (Sunshine St) |   |                                  | Ethernet Switch |          |          |
|-----------------------|---|----------------------------------|-----------------|----------|----------|
| Intersection          |   |                                  | New             | Relocate | Existing |
| Rte. D (Sunshine St)  | @ | Enterprise Avenue                |                 | 1        |          |
| Rte. D (Sunshine St)  | @ | HAWK Signal East of Woodward Ave | 1               |          |          |
| Rte. D (Sunshine St)  | @ | Ingram Mill Rd/ Deeswood Ave     |                 | 1        |          |

**2.0 Ethernet Switch.** The Ethernet Switches and power supplies shall be contractor furnished and MoDOT configured. The contractor shall work with MoDOT to install the switches and power supplies. The contractor shall furnish and install CAT6 cable and fiber optic jumpers to complete connections to the fiber patch panel and installed hardware. The ethernet switch shall be the following type.

Cisco 2960CX-8TC-L

**2.1** The ethernet switches and power supplies shall be rack mounted on the inside wall of the ITS cabinet, as directed by the engineer.

**3.0 Transceiver Modules.** For each ethernet switch, the contractor shall provide two (2) transceiver modules. The Transceiver Module shall be the following type.

Cisco GLC-FE-100FX-RGD Compatible 100BASE-FX SFP 1310nm 2km DOM Duplex LC MMF Optical Transceiver Module (Industrial)

**3.1** The transceiver modules will be included in the contract unit price for the ethernet switch.

**4.0 CAT6 Cable.** The contractor shall furnish and install CAT6 cable in ITS cabinets and complete connections between the Ethernet Switch in the ITS cabinet and traffic signal controller. All other devices shall be installed in the ITS cabinet and connected with CAT6 pigtailed from that equipment, such as POE injector, video detection system encoder, or other equipment in the ITS cabinet to the switch as shown on the plans.

**5.0 Method of Measurement.** Measurement will be made per each Ethernet Switch furnished and installed by the contractor complete in place.

**6.0 Basis of Payment.** Payment for furnishing and installing the Ethernet Switch in the ITS cabinet complete in place including all labor, equipment, material, appropriate connectors, fiber optic jumpers, tools, and incidental items required to provide a fully functioning system, will be considered completely covered by the contract unit price for the ethernet switch. No additional compensation will be made.

| Item No.  | Unit | Description                                     |
|-----------|------|-------------------------------------------------|
| 910-99.02 | Each | Misc. Furnishing and Installing Ethernet Switch |

**6.1** Payment for relocating the Ethernet Switch in the ITS cabinet complete in place including all labor, equipment, material, appropriate connectors, fiber optic jumpers, tools, and incidental items required to provide a fully functioning system, will be considered completely covered by the contract unit price for the relocate existing ethernet switch. No additional compensation will be made.

| Item No.  | Unit | Description                             |
|-----------|------|-----------------------------------------|
| 910-99.02 | Each | Misc. Relocate Existing Ethernet Switch |

**6.2** The contract unit price for furnishing and installing CAT6 Ethernet cable will be paid for as shown in Job Special Provision **CAT6 Ethernet Cable**.

Y. ITS Cabinet

**1.0 Description.** This work shall consist of furnishing and installing new cabinets and base adapters. This work shall be in accordance with Sec 902 and 1092.

**2.0 Materials.** The cabinet shall be a Type 332 in accordance with the Traffic Signal Control Specifications published by the California Transportation and Housing Agency, Department of Transportation (Caltrans). The aluminum housing material shall be a minimum of 0.125 inches in thickness. All cabinets shall have a natural aluminum finish, free from blemishes. All seams shall be continuously welded and ground smooth. All fasteners must be stainless steel.

The housing shall feature two doors with latches, hinges, and door gaskets. One cabinet door shall have louvers in the lower quarter and a replaceable filter for ventilation. All cabinet doors shall be equipped with No. 2 Corbin locks. Two keys shall be provided with each cabinet. An EIA 19-inch rack shall be installed including side panels where cabinet power distribution components will be mounted.

A thermostatically controlled fan shall be installed in the top of the cabinet capable of moving 100 CFM of ventilation airflow.

LED lighting fixtures suitable for mounting at the top of the 19-inch rack shall be installed in both the front and rear of the cabinet. Each shall be wired through door activated switches.

One aluminum 19-inch rack mountable shelf shall be provided. The shelf shall be secured to the rack rails at all four corners.

**3.0 Splice Cabinet Electrical Distribution.** A cabinet electrical distribution system consisting of the following elements shall be installed. Components shall be neatly arranged, mounted, and wired on the lower quarter of the hinge-side rack side panel.

- One power wiring block for service conductors
- One 20 Amp single pole unit mount, feed-through circuit breaker One Edco SHA1210 surge suppressor or approved equivalent
- One 2 – gang outlet box with duplex outlets installed (quadraplex) with cover plate
- One 12 position minimum barrier type terminal strip providing access to AC+ where cabinet fan and light circuits will be landed
- One 12 position minimum copper AC neutral buss with set screws One 12 position minimum copper earth ground buss with set screws



**4.0 Fiber Distribution Unit (FDU).** Each cabinet shall be equipped with a 19-inch rack mounted fiber distribution unit (FDU) to provide a termination, splicing and connection point for fiber optic cables. See Job Special Provision ***Fiber Distribution Unit (FDU)*** for details.

**5.0 Acceptance Testing.** Acceptance testing of the cabinet shall include a visual inspection and shall include the testing of lights, fan, and power outlets. Testing to ensure there are properly working terminated fibers shall be completed per Job Special Provision ***Fiber Optic Cable***.

Use a device that measures resistance to ground using the three-point fall-of-potential method to ensure that the resistance from the cabinet's earth ground buss to ground does not exceed 5 ohms. Install additional ground rods if necessary to achieve this requirement.

Provide all equipment and personnel needed to safely conduct the tests, arrange for the Engineer's representative to witness the tests, and provide a written summary indicating test results.

**6.0 Basis of Payment.** Payment for the above items will include all costs necessary to complete the work including installation, incidentals, and testing of a fully functional system.

| Item No.  | Unit | Description       |
|-----------|------|-------------------|
| 910-99.02 | Each | Misc. ITS Cabinet |

## Z. CAT6 Ethernet Cable

**1.0 Description.** All new cable used to provide communications between the Ethernet switch and traffic signal cabinet equipment on this project shall conform to the following requirements to ensure consistency and acceptability of the system.

**2.0 Materials.** Provide CAT6 cable as required per the manufacturer's specifications and recommendations to allow for direct connectivity between a field Ethernet switch and traffic signal cabinet.

**2.1** Cables shall be rated for outdoor operations in the conditions (temperature range, humidity, etc.) in which the device manufacturer has specified as the acceptable range of operations.

**2.2** Cable splices are not allowed.

**3.0 Method of Measurement.** Measurement will be made per linear foot (LF).

**4.0 Basis of Payment.** Payment for the CAT6 Ethernet cable will be considered full compensation for all contractor-provided equipment, connections, labor and material to complete the installation of cable.

| Item No.  | Unit        | Description                 |
|-----------|-------------|-----------------------------|
| 910-99.03 | Linear Foot | Misc. Ethernet Cable (CAT6) |

AA. Relocation of Existing Fiber Optic Cable

**1.0 Description.** This work shall consist of relocating, splicing, and terminating fiber optic cables as shown on the plans. The work shall be in accordance with Sec 902 and 1092.

**2.0 Fiber Optic Cable Requirements.** The fiber optic cable shall be a 24-count (12/12) Single Mode Fiber Optic (SMFO) & Multimode Fiber Optic. The 24 OR 36 strands shall be bundled in groups of 6 per buffer tube. The two (2) buffer tubes containing fiber shall be blue and orange. Each buffer tube shall contain 12 strands with the appropriate colors shown in the table below.

| 24-STRAND (12MM/12SM) FIBER OPTIC CABLE |             |             |
|-----------------------------------------|-------------|-------------|
| 24-STRAND (6MM/18SM) FIBER OPTIC CABLE  |             |             |
| 36-STRAND (12MM/24SM) FIBER OPTIC CABLE |             |             |
| FIBER NO.                               | BUFFER TUBE | FIBER COLOR |
| 1                                       | BLUE        | BLUE        |
| 2                                       |             | ORANGE      |
| 3                                       |             | GREEN       |
| 4                                       |             | BROWN       |
| 5                                       |             | SLATE       |
| 6                                       |             | WHITE       |
| 7                                       | BLUE        | RED         |
| 8                                       |             | BLACK       |
| 9                                       |             | YELLOW      |
| 10                                      |             | VIOLET      |
| 11                                      |             | ROSE        |
| 12                                      |             | AQUA        |
| 13                                      | ORANGE      | BLUE        |
| 14                                      |             | ORANGE      |
| 15                                      |             | GREEN       |
| 16                                      |             | BROWN       |
| 17                                      |             | SLATE       |
| 18                                      |             | WHITE       |
| 19                                      | ORANGE      | RED         |
| 20                                      |             | BLACK       |
| 21                                      |             | YELLOW      |
| 22                                      |             | VIOLET      |
| 23                                      |             | ROSE        |
| 24                                      |             | AQUA        |

**2.1 Fiber Assignment.** The Fiber assignments shall be provided as part of the plans.

**2.2 Fiber Optic Cable Route Records.** The contractor shall provide MoDOT with a cable route diagram indicating the actual cable route and foot marks, for all intersections, directional change points in the cable routing, and all termination points. The Contractor shall record these points during cable installation. Cable system As-Built drawings showing the exact cable route shall be provided by the Contractor to MoDOT. Information such as the location of slack cable and its quantity shall also be recorded in the cable route diagram. Each fiber connectors and patch panel connectors shall be tagged with its fiber number and associated field element location. Each tag shall be permanently attached by a nylon tie-lock to the cable or connectors.

**3.0 Acceptance Testing.** After the fiber optic cable installation, each fiber in each section shall be tested for attenuation and continuity as a minimum. The testing shall be conducted by a licensed independent testing agency, approved by MoDOT. Contractor shall make all necessary arrangements to facilitate the performance of all testing. Any sections that fail the testing shall be replaced at the contractor's expense and retested. No separate payments will be made for testing, to the contractor.

All testing shall be performed in an accepted manner and in accordance with the testing equipment manufacturer's recommendations. All data shall be recorded and submitted to the engineer.

**3.1 Attenuation.** The end-to-end attenuation shall be measured for each link after installation by insertion loss testing.

The launch cable shall be connected to the light source and the receive cable to the power meter. The two reference cables shall then be connected via a termination hub. A reference power reading (P1) shall then be taken and recorded.

The system link to be tested shall then be inserted between the launch and receive cables using 2 termination hubs. A test power reading (P2) shall then be taken and recorded.

The link attenuation A) in dB shall be recorded as the mathematical difference between the reference power (P1) and the test power (P2).

Insertion loss testing shall be performed in both directions along the link. The direction of the test shall be recorded in the documentation. The testing shall be submitted on disk as well as a hardcopy.

**3.2 Transmitter/Receiver Power Levels.** The output power levels at the network hardware transmitters and receivers shall be measured in milliwatts and recorded for system documentation.

The power meter shall be connected to the transmitter side of the equipment with a system jumper. The transmit power level shall then be read and recorded. The transmitter shall then be re-connected to the cable link and the power meter connected to the receiver side of the equipment. The receive power level shall then be read and recorded.

**3.3 Continuity.** Continuity tests shall be used to determine whether a test or system jumper does or does not pass light. A continuity test shall also be used to assure the fibers have not been crossed over in the jumper and to assure that the transmit fiber goes to the receiver fiber.

To perform continuity test, a high-intensity flashlight shall be aimed into the connector at one end, while an observer watches for a flicker of light at the other end.

**3.4 Optical Time Domain Reflectometer (OTDR) Testing.** An Optical Time Domain Reflectometer (OTDR) shall be used to evaluate the quality and length of cable reels prior to use. The fiber loss in dB/Km and the length of each reel shall be recorded in the documentation. The maximum attenuation of the cable shall be 3.5 dB/Km nominal, measured at room temperature at 1310 nm [equivalent for multi-mode]. This shall be submitted on disk with a copy of the software for review.

A hard copy of OTDR signature traces for all system links shall be made and provided in the documentation.

**4.0 Method of Measurement.** No measurement for relocating, splicing, and terminating fiber optic cables as shown on the plans will be made.

**5.0 Basis of Payment.** No direct payment will be made to the contractor for all costs incurred with compliance of this provision. All equipment and labor necessary for the work described will be considered incidental to and completely covered by other pay items provided in the contract.

BB. Fiber Distribution Unit (FDU)

**1.0 Description.** Fiber distribution unit (FDU) shall be contractor furnished and contractor installed at the locations shown on the Plans.

The section includes material and installation for FDU.

**2.0 Special Specification.** The FDU shall act as the demarcation point between the fiber optic cable via the fiber pigtail from the splice closure and the terminal equipment via the fiber optic patch cords. The Contractor shall furnish and install 6 port ST connector panels and pre-terminated pigtails to be spliced to the backbone fiber. The approved type of optical connectors on the one end of each of the pigtails shall be ST and screw into a sleeve securely mounted to a patch panel within the FDU enclosure. The maximum optical loss across the connection shall not exceed 0.4 dB.

The FDU housings shall be supplied by the contractor and shall be mounted in the 19-inch rack, as shown on the plans. The FDU shall accept a minimum of forty-eight (48) fiber terminations. The cabinet shall have fiber optic cable entrances with cable sheath strain relief, leading to the FDU.

**3.0 Basis for Payment.** Payment for the above items shall include all costs necessary to complete the work including furnishing, installation, incidentals, and testing of a fully functional system.

| Item No.  | Unit | Description                           |
|-----------|------|---------------------------------------|
| 910-99.02 | Each | Misc. 48 Port Fiber Distribution Unit |

CC. Disposition of Existing Signal, Lighting and Network Equipment

**1.0 Description.** This work shall consist of the disposition of existing signal, lighting, and network equipment as shown on the plans and delivering it to the specified MoDOT maintenance lot.

**2.0 Construction Requirements.** All controllers, cabinets, cabinet equipment, network equipment, DMS equipment, antennas, radios, modems, and other equipment noted in the plans shall be removed by the contractor and delivered to the following location:

Springfield Maintenance Lot  
2455 N. Mayfair  
Springfield, MO 65803

**2.1** The contractor shall notify the Commission's representative 24 hours prior to each delivery by calling the contact listed below.

Joe Dotson, Urban Traffic Supervisor  
Phone: (417) 895-7599 or (417) 733-0664

**2.2** The contractor shall exercise reasonable care in the handling of the equipment during the removal and transportation. Should any of the equipment be damaged by the contractor's negligence, it shall be replaced at the contractor's expense. Delivery shall be within 2 working days of removal. All items returned shall be tagged with the date removed, project number and location/intersection.

**2.3** Equipment shown on the plans for removal not listed in section 2.0 above shall become the property of the contractor and removed from the project.

**3.0 Basis of Payment.** Payment for removal, handling and transportation of all equipment specified will be considered completely covered by the contract unit price for 202-20.10, Removal of Improvements, per lump sum.

DD. Remote Pushbutton Post

**1.0 Description.** This work shall consist of installing pushbutton posts at the locations shown on the plans.

**2.0 Construction Requirements.**

**2.1** The post shaft shall be schedule 40 aluminum pipe that is 48 inches in length with a 4 inch diameter (4.5-inch O.D).

**2.2** The post shall be installed on top of a breakaway pedestal base mounted to a foundation in the sidewalk. The sidewalk foundation shall be constructed as part of the sidewalk and have an 18-inch diameter and 12-inch depth. The breakaway pedestal base shall be mounted to the sidewalk foundation using proper sized anchor bolts according to manufacturer's instructions.

**2.3** A slip form connection shall be provided on the wiring in the breakaway pedestal base to sever the connection in the event that the pushbutton post is struck by a vehicle. Access to wiring shall be provided through an access panel in the breakaway pedestal base as well as the pipe post cap. The cap shall be secured and weather proofed when it is not opened for access.

**2.4** The final product shall meet or exceed Americans with Disabilities Act (ADA) requirements for pedestrian facilities.

**3.0 Method of Measurement.** Final measurement of remote pushbutton posts will be made per each. This shall include the dome cap, post, breakaway base, anchor rods, concrete forming tube, concrete, removal of existing concrete medians, median strips or concrete pavement, and all miscellaneous appurtenances to construct the post as shown on the plans.

**4.0 Basis of Payment.** Payment for furnishing all labor, equipment, materials, and tools necessary to place remote pedestrian pushbutton posts will be completely covered by the contract unit price for:

| Item Number | Type / Description           | Unit |
|-------------|------------------------------|------|
| 902-99.02   | Misc. Remote Pushbutton Post | Each |

EE. 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.

FF. No Value Engineering Proposals for 2.5 Inch Perforated Square Steel Tube (PSST) Posts and Concrete Post Anchors for 2.5 Inch Perforated Square Steel Tube (PSST) Posts

This project will require 2.5 In. Perforated Square Steel Tube (PSST) Posts and Concrete Post Anchors for 2.5 In. Perforated Square Steel Tube (PSST) Posts as specified in the plans. No Contractor initiated Value Engineering Change Proposals (VECPs) or Practical Design Value Engineering Change Proposals (PDVECPs) will be accepted for any part of installing existing signs or new signs on new Perforated Square Steel Tube (PSST) Posts and Concrete Post

Anchors different than the 2.5 Inch Perforated Square Steel Tube (PSST) Posts and Concrete Post Anchor for 2.5 Inch Perforated Square Steel Tube (PSST) Posts that is required.

GG. Removing and Re-installing No Solicitation Sign and Neighborhood Watch Sign

**1.0 Description.** An existing No Solicitation Sign and Neighborhood Watch Sign are located at the entrance of Washita St. and Route D and are shown in the plans for removal and reinstallation.

**2.0 Construction Requirements.** The contractor shall remove, store, and reinstall the signs and post as shown on the plans. If the post or signs are damaged, the contractor shall replace these at the contractor's expense. If the contractor can salvage the existing post, it can be re-used and re-installed outside the limits of the new radius. Otherwise, a new post matching the existing one will be required as approved by the engineer.

**3.0 Basis of Payment.** No direct payment for a new post will be made. Payment for this work, including all materials, equipment, and labor shall be completely covered by the contract unit price for 202-20.10, Removal of Improvements, per lump sum.

HH. Option of Accelerated PCCP Concrete on Paved Approaches

**1.0 Description.** The contractor has the option of using an accelerated Portland cement concrete pavement (PCCP) for use in paved approaches as shown on the plans or as approved by the engineer.

**2.0 Construction Requirements.** All materials, mixture and placement requirements shall be in accordance with all applicable portions of Section 501, 502, and 613, except as specified herein.

**2.1** The concrete mixture shall obtain a compressive strength of 3,500 pounds per square inch prior to opening to traffic. A non-chloride accelerator will be allowed as approved by the engineer.

**3.0 Method of Measurement.** No measurement of accelerated PCCP will be made.

**4.0 Basis of Payment.** No direct payment for accelerated PCCP will be made. Any accelerated PCCP concrete used in paved approaches will be considered included in and completely covered by contract unit price for Pay Item 608-99.05, Modified Paved Approach, 8 in, per square yard.

II. Use of Right-of-Way and Temporary Construction Easements

**1.0 Description.** The Commission has acquired right-of-way and temporary construction easements for the contractor to use during construction on several commercial properties. The contractor shall not to disturb any existing trees, landscaping, sprinkler heads, or irrigation lines within these developed areas unless noted on the plans. The contractor shall solely be responsible for repairing any damage to the property caused by contractor operations.

**2.0 Construction Requirements.** The contractor shall limit their operations to existing public right-of-way and the acquired new right-of-way and temporary construction easements as specified above. Most of the adjacent parcels along this project are of commercial use. The

contractor shall not stage their equipment during non-working hours in either public right of way or the temporary construction easements. The contractor may elect to work out an agreement that is separate from this contract with individual property owners for storage of material and equipment during construction. The contractor shall comply with Division 100 of the Standard Specifications for storage of material and equipment.

**3.0 Basis of Payment.** No direct payment will be made for compliance to this provision.

JJ. Access to Commercial Properties

**1.0 Description.** This improvement is in a highly commercial area. While working on and around commercial entrances, the contractor shall make every reasonable effort to minimize any interference to business and to pursue the work diligently. Under no circumstances shall the contractor block ingress/egress to and from businesses during the normal business hours of each business unless approved by the property owner and the engineer.

**1.1** The contractor shall contact each business at least one (1) week in advance to advise them of the work that will take place before working on each business entrance. In some cases where a property has more than one entrance, the property owner may have a preference on whether to have one entrance closed while it is worked on or whether to have the entrances worked on one-half at a time. The contractor is required to do the work according to each individual property owner's preference. The contractor shall not disturb any existing trees, shrubs, landscaping, small block walls or irrigation lines. The contractor shall be solely responsible for repairing any damage to the property caused by contractor operations.

**2.0 Basis of Payment.** No direct payment will be made to the contractor for all costs incurred with compliance of this provision.

KK. Traffic Separator Curb with Delineators

**1.0 Description.** This work shall consist of providing and installing a traffic separator curb system at locations shown on the plans. The traffic separator curb system shall consist of a modular curb with interchangeable delineator posts. The modular curb shall be continuous throughout the system and have, at a minimum, 2 reflective tabs per modular curb unit. The modular units shall be attached to the driving surface by means of mechanical fasteners. The delineator post used for the traffic separator curb system shall be 36 inches in height above the roadway surface and contain, at a minimum, 2 reflective wraps around the entire post.

**2.0 Material.** The traffic separator curb system used shall be NCHRP-350 compliant. The color of the traffic separator curb system shall be consistent with its intended use and as described in Part 3 of the current edition of the Manual on Uniform Traffic Control Devices. A list of acceptable traffic separator curb systems is shown below:



| <b>Traffic Separator Curb with Delineators</b> |                                         |
|------------------------------------------------|-----------------------------------------|
| <b>Product</b>                                 | <b>Manufacturer</b>                     |
| FG 300 Interstate Grade Curb System            | Pexco/Davidson Traffic Control Products |
| Shur-Curb Traffic Channelizer                  | Shur-Tite Products                      |
| Tuff Curb                                      | Impact Recovery Systems                 |
| Dura-Curb                                      | John Thomas, Inc. (JTI)                 |

The contractor may propose an alternative product meeting the specifications of the two systems listed above. However, the engineer reserves the right to accept or reject any product not shown on the list.

**3.0 Construction Requirements.** The surface receiving the traffic separator curb system shall be clean and free of any rocks and/or debris. Furthermore, the receiving surface shall be planar such that the entire bottom of each modular curb unit maintains constant contact. The traffic separator curb system shall be installed as per the manufacture's recommendations.

**4.0 Method of Measurement.** Payment for the traffic separator curb system complete in place including incorporated delineator post and reflective tabs will be made to the nearest linear foot.

**5.0 Basis of Payment.** The accepted quantity of traffic separator curb, complete in place, will be paid for at the contract unit bid price for item 617-99.03, Traffic Separator Curb with Delineators, per linear foot.

#### LL. Schedule of Signal, Sidewalk, Driveway, ADA Work, and Paving Operations

**1.0 Description.** This work shall consist of scheduling paving work for project J8S0745 after the signal, sidewalk, driveway, and other ADA work is completed.

**2.0 Construction Requirements.** The contractor shall not pave the final lift of any roadway section adjacent to signal, sidewalk, driveway, and other ADA work prior to the signal, sidewalk, driveway, and other ADA work being completed.

**2.1** The contractor will be allowed to do temporary milling/filling as required or as approved by engineer.

**2.2** Before leaving a work area (signal reconstruction, HAWK construction, etc.) to move to another work area, the contractor shall ensure a majority of the work is complete and has been approved by the engineer. The contractor shall install any temporary traffic control, including temporary pavement marking, necessary for the functional operation of these areas.

**3.0 Method of Measurement.** No measurement will be made.

**4.0 Basis of Payment.** No direct payment will be made to comply with this provision. All equipment and labor necessary for the work described will be considered incidental to and completely covered by other pay items provided in the contract.

#### MM. Pavement Edge Treatment for Drop Off Conditions

**1.0 Description.** This work shall consist of providing pavement edge treatment due to construction methods used by the contractor.

**2.0 Construction Requirements.** The contractor shall perform construction operations so there will be no drop off exceeding 2 inches adjacent to traffic. The contractor shall install pavement edge treatment at locations where the drop off is greater than 2 inches adjacent to traffic.

**3.0 Method of Measurement.** No measurement of pavement edge treatment as described above will be made. Treatment of any drop off greater than 2 inches shall be considered incidental to and completely covered by other pay items provided in the contract.

**4.0 Basis of Payment.** No direct payment will be made to comply with this provision.

NN. Contractor Furnished Surveying and Staking – SW

In addition to the requirements of Section 627 of the Missouri Standard Specifications for Highway Construction, the following shall apply:

**1.0 Description.** The contractor shall be responsible for all layout required on the project. This responsibility shall include, but not be limited to the following: Construction signing, transition milling, pavement marking, loop detectors, etc.

**1.1** The above list is not all inclusive. The contractor shall have the primary responsibility for these operations. The contractor shall provide the Resident Engineer with a staking plan layout for approval prior to the installation of signs. The RE will provide assistance during this layout provided a request is submitted to the RE or Construction Project Manager 48 hours in advance. This will ensure that all permanently mounted traffic control devices remain consistent with District policy and avoid re-staking. If the contractor installs any signs without engineer approval, all costs associated with re-staking and/or relocation will be at the contractor's expense.

**1.2** The intent of this provision is to increase the quality of our work zones and minimize negative impacts to the contractor's schedule that can result from delays in staking.

**1.3** Any adjustments to the plan quantities or line numbers established in the contract shall be approved by the Engineer.

**2.0 Basis of Payment.** No direct payment will be made to cover the costs associated with these additional requirements. All costs will be considered completely covered by the unit bid price submitted for Contractor Furnished Surveying and Staking.

OO. Modified Type A Gutter

**1.0 Description.** This work shall consist of constructing a Modified Type A Gutter as shown on the plans and in accordance with Section 609 of the Standard Specifications.

**2.0 Construction Requirements.** The contractor shall refer to the construction plans detailing the locations with Modified Type A Gutter. The contractor shall also pay special attention during construction to ensure proper drainage is achieved upon completion of construction.

**3.0 Method of Measurement.** Measurement will be made to the nearest linear foot along the flow line of the limits of the Modified Type A Gutter.

**4.0 Basis of Payment.** All labor, equipment and materials required to construct the Modified Type A Gutter as shown on the plans and by this provision will be considered completely covered by Pay Item No. 609-99.03, Modified Type A Gutter, per linear foot.

PP. Modified Type B Curb

**1.0 Description.** This work shall consist of constructing a Modified Type B Curb as shown on the plans and in accordance with Section 609 of the Standard Specifications.

**2.0 Construction Requirements.** The contractor shall refer to the construction plans detailing the locations with Modified Type B Curb. The contractor shall pay special attention during construction to match the heights of the new Modified Type B Curb to the adjacent curb that is being tied into. The contractor shall use Standard Plan 609.00 and adjust the length of the tie bars accordingly based on the height of the curb as shown in note "D."

**3.0 Method of Measurement.** Measurement will be made to the nearest linear foot along the center of the curb.

**4.0 Basis of Payment.** All labor, equipment and materials required to construct the Modified Type B Curb as shown on the plans and by this provision will be considered completely covered by Pay Item No. 609-99.03, Modified Type B Curb, per linear foot.

QQ. Type A or Type B Curb and Gutter Construction

**1.0 Description.** This work shall consist of constructing curb and gutter as shown on the plans or as directed by the engineer. This work shall be in accordance with Sec 609 and standard drawing 609.00.

**2.0 Construction Requirements.** The curb and gutter along Route D (Sunshine St.) was originally constructed as Type A Curb and Gutter but some sections have been reconstructed over the years to include areas of Type B Curb and Gutter. In areas shown for replacement in the plans, the contractor shall match the curb and gutter type of the adjoining sections or use Type B Curb and Gutter where sidewalk is directly behind the curb and gutter.

**3.0 Method of Measurement.** Curb and gutter will be measured to the nearest linear foot along the face of the curb.

**4.0 Basis of Payment.** All labor, equipment and materials required to construct Type A or Type B Curb and Gutter as shown on the plans will be considered completely covered by Pay Item No. 609-10.52, Type B Curb and Gutter, per linear foot.

RR. Steel Plate

**1.0 Description.** This work shall consist of installing a steel plate as shown on the plans.

**2.0 Construction Requirements.** The contractor shall refer to the construction plans detailing the locations of the steel plates. The contractor shall pay special attention during construction to

ensure proper drainage is achieved where the steel plates are to be installed.

**2.1** The one half (½) inch steel slip-resistant plate shall be installed flush with the top of the Modified Type A Gutter or sidewalk and secured to the top of the angle iron. The steel slip-resistant plate shall have a minimum static coefficient of friction of 0.6 and be ADA compliant.

**3.0 Method of Measurement.** Measurement will be made to the nearest square foot.

**4.0 Basis of Payment.** All labor, equipment and materials required to install the steel plate as shown on the plans and by this specification will be considered completely covered by Pay Item No. 604-99.04, Steel Plate, per square foot. No direct payment will be made for other incidental items required for installation of the steel plates.

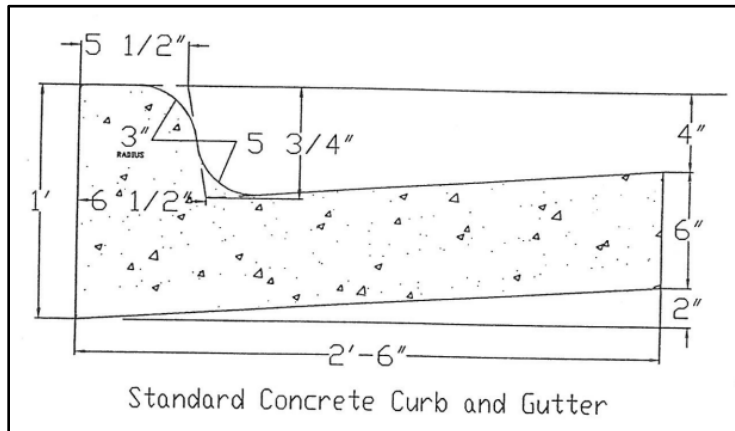
SS. Greene County Curb and Gutter Standard Detail

**1.0** In addition to the Missouri Standard Plans for Highway Construction, the following shall apply:

**1.1 Description.** Part of this project is located outside the Springfield City Limits and will use the curb and gutter standard for Greene County found in their ***Design Standards for Public Road Improvements*** at the link below. The contractor shall be responsible for incorporating the following drawing when constructing the curb and gutter at Brandon Ave., Oakmont Ave., and Washita St.

**2.0 Construction Requirements.** In addition to the county's requirements, the contractor shall comply with the provisions outlined in the Missouri Standard Specifications for Highway Construction and any instructions given by the engineer. The contractor may find the county's design standards on the county's website at the link below.

<https://greencountymo.gov/files/PDF/file.pdf?id=35643>.



**3.0 Basis of Payment.** No direct payment will be made to cover the costs associated with these requirements. All costs will be considered as included in and completely covered by the unit bid price submitted for the following items:

| Item No.  | Unit        | Description                                |
|-----------|-------------|--------------------------------------------|
| 609-99.03 | Linear Foot | Misc. Curb and Gutter (Greene County Std.) |

TT. Modified Paved Approach

**1.0 Description.** This work shall consist of constructing modified paved approaches as shown on the plans in accordance with Sec 608.

**2.0 Construction Requirements.** The modified paved approaches shall be constructed as shown on the plans in accordance with Sec 608.

**3.0 Method of Measurement.** The modified paved approaches will be measured in accordance with Sec 608.

**4.0 Basis of Payment.** All costs incurred for constructing modified paved approaches as shown on the plans, complete in place, will be paid for at the contract unit price for Pay Item 608-99.05, Modified Paved Approach, 8 in, per square yard.

UU. Positive Drainage

**1.0 Description.** The contractor shall be made aware that this project alters the drainage collection and routing throughout the project. Care shall be taken during construction to provide proper drainage.

**2.0 Construction Requirements.** The contractor shall maintain positive drainage for all properties and shall not create locations of ponding or other drainage concerns to property owners. The contractor shall alert the engineer of any potential concerns during construction that may affect the ability to maintain positive drainage.

**3.0 Basis of Payment.** No direct payment will be made for compliance with this provision. All equipment and labor necessary for the work described shall be considered incidental to and completely covered by other pay items provided in the contract.

VV. Sodding and Fertilizing

**1.0 Description.** This work shall consist of installing sod and fertilizer in accordance with Sections 801 and 803 of the Standard Specification.

**2.0 Construction Requirements.** Sod shall be installed at all locations as shown on the plans or where the contractors' operations have disturbed adjacent, existing grass landscapes or as approved by the engineer. Fertilizer shall be applied to all sodded locations per Manufacturers Recommendations. The type of sod and fertilizer shall be as noted below.

Job No.: J8S3133  
Route: D  
County: Greene

|                                         |
|-----------------------------------------|
| <b><u>Fertilizer</u></b>                |
| Starter Fertilizer 12-12-12 or 10-10-10 |

|                       |
|-----------------------|
| <b><u>Sod</u></b>     |
| Turf Type Tall Fescue |

**3.0 Method of Measurement.** Measurement of sodded areas will be made to the nearest square yard. The area required for fertilizer shall match the final area for sod. Plan quantities were estimated from sidewalk locations with adjacent grassy areas. More or less quantity of said materials may be needed depending upon construction requirements at each location. The Engineer shall verify and approve the contractor's location and quantity of newly sodded areas.

**4.0 Basis of Payment.** All costs incurred by the Contractor by reason of compliance to satisfy the above requirements will be considered incidental to and completely covered in the bid item 803-10.00A, Turf Type Tall Fescue Sodding, measured per square yard.

WW. Seeding and Mulching Requirements JSP-25-03

**1.0 Seeding.** Seeding shall be in accordance with Sec. 805 except as otherwise stated herein. Cool season grasses shall be utilized in accordance with Standard Plan 805.00.

**1.1 Temporary Seeding.** Temporary seeding shall be in accordance with Sec. 806.50 except as otherwise stated herein.

**2.0 Mulching.** Mulching shall be in accordance with Sec. 802 except as otherwise stated herein.

**3.0 Method of Measurement.** No measurement will be made for seeding, temporary seeding or mulching. Seeding and mulching of all disturbed areas, including any additional areas disturbed beyond what is shown on the plans, shall be considered included in the single lump sum item provided.

**4.0 Basis of Payment.** All labor, equipment, and materials necessary to complete all seeding, temporary seeding and mulching shall be completely covered under the lump sum price for item 805-99.01, Seeding and Mulching - Cool Season Grasses.

XX. Pavement Marking on Entrances, Driveways, and Paved Approaches

**1.0 Description.** This work shall consist of installing new pavement marking on business entrances, driveways, and paved approaches that was removed or damaged during the construction of the new entrance, driveway, or paved approach.

**2.0 Construction Requirements.** Prior to the removal of any existing entrance, driveway, or paved approach with existing pavement marking, the contractor shall document the type and location of the pavement marking. This information shall be used to replace the pavement marking back to its original location once the entrance or driveway is complete.

**3.0 Method of Measurement.** No measurement will be made.

**4.0 Basis of Payment.** No direct payment will be made for installing the new pavement marking.

All costs associated with this work shall be considered incidental to other pay items provided in the contract.

YY. Shared Traffic Control Devices

**1.0 Description.** This work shall consist of sharing specific traffic control devices between projects that are let in combination with this project.

**2.0 Construction Requirements.** The following items will be paid for on project J8S0745 and shall be used by the contractor on projects J8S3133, J8S3153, and J8S0745. The contractor shall coordinate the use of these traffic control devices for all projects listed above without any additional compensation.

Road Work Next XX Miles Signs  
End Road Work Signs  
Point of Presence Signs  
Rate Our Work Zone Signs  
Work Zone No Phone Zone Signs

**2.1** Road Work Ahead Signs at side streets, project beginning, and project ending will be provided and paid for under project J8S0745. Road Work Ahead Signs shown in other traffic control packages as shown on the plans for the other projects listed will be provided and paid for under those projects.

**3.0 Method of Measurement.** No measurement will be made for sharing traffic control signs between projects.

**4.0 Basis of Payment.** No direct payment will be made to comply with this provision. All equipment and labor necessary for the work described will be considered incidental to and completely covered by other pay items provided in the contract.

ZZ. Cooperation Between Contractors – SW

**1.0 Description.** The contractor shall be aware that other contracts will be administered in the vicinity and timeframe as this contract.

**1.1** Job Number J8P3144 provides for pavement improvements, ADA, safety and operational improvements on Interstate Loop 44 (Chestnut Expressway) in Greene County. Construction is scheduled for 2025-2026.

**1.3** Job Numbers J8I3225, JSU0076, J8I3044C, JST0088B and JSU0114 are resurfacing, pavement rebuild and widening, and sound abatement projects let in combination on I-44 in Springfield, MO. Construction is scheduled for 2025-2027.

**2.0 Requirements.** The contractor shall coordinate work so as not to interfere with or hinder the progress or completion of the work being performed by the other contractor. The contractor shall also coordinate work to minimize impacts to the traveling public between the work zones.

**2.1** The contractor will not be granted additional time due to conflicts with other contractors, unless approved by the engineer.

**3.0 Basis of Payment.** No direct payment or additional time 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.

AAA. Notice to Bidders of Funding by Third Party JSP-18-02A

**1.0** Bidders are advised that the City of Springfield, Missouri is required to provide substantial funds for construction of Job No. J8S3133. The contractor shall verify that the Commission received money prior to beginning any work on the included items listed below.

| Item Number | Description                       | Unit |
|-------------|-----------------------------------|------|
| 608-99.05   | Pigmenting and Texturing Concrete | SY   |

**2.0** Bidders acknowledge that their bids are made with knowledge of and subject to the condition of the City of Springfield, Missouri providing substantial funds prior to authorization of any award of a contract for this job by the Commission.

**3.0** Bidders agree that they shall be estopped, both in law and equity, to assert any right to award of a contract for this job by the Commission should the City of Springfield, Missouri not provide substantial funds for any reason.

BBB. Right-of-Way Clearance – Delayed Possession

**1.0 Description.** The right of way for this project has been acquired except for:

Parcel 1 (National Retail Prop, LP) – New RW and TCE  
Parcel 7 (Commerce Bank) – New RW and TCE

**1.1** The contractor shall inform itself of the location of this tract. No encroachment, storage of equipment and materials or construction on these tracts shall be permitted until notification by the engineer is given that these tracts have been acquired.

**1.2** The contractor shall schedule its work utilizing the available right of way until these two tracts are cleared for construction, which is estimated to be October 19, 2026. However, this date expressly is not a warranty by or contractually binding on the Commission as the date the fourteen Tracts will be clear for construction. No encroachment, storage of equipment and materials or construction on these tracts shall be permitted until the contractor is notified by the engineer that these tracts have been acquired.

**1.3** The contractor shall have no claim for damage for delay, disruption, interference or otherwise as a result of the unavailability of **Parcels listed above in Item 1.0.** The contractor may be given an extension of time upon proof of actual delay caused by the unavailability of these tracts as approved by the engineer.



CCC. Work Zone Segment Commitment

**1.0 Description.** As a result of discussions with business owners, the Commission's representative has committed to various items that may impact the construction of this project. The intent of this special provision is to inform the contractor of these commitments so that all parties have the same reasonable expectation for the construction of this project.

**2.0 Construction Requirements.** The contractor shall not perform work between Eastgate Avenue/S Bedford Avenue and Blackman Road until January 4, 2027. In addition, the contractor shall not perform work between Eastgate Avenue/S Bedford Avenue and Blackman Road between November 1, 2027 and January 1, 2028. Full ingress/egress to all businesses shall be maintained during these timeframes, unless approved by the property owner and the engineer.

**3.0 Basis of Payment.** No direct payment will be made to the contractor to recover the cost of equipment, labor, materials or time required to fulfill the above provision, unless specified elsewhere in the contract document.

DDD. Early Notice to Proceed

**1.0 Description.** The contractor will be given a Notice to Proceed Date for this project, as stipulated in JSP B – Contract Liquidated Damages. All contracts shall be executed and returned to the Commission by or before the end of the day on the business day prior, in order to commence work on the Notice to Proceed date.

**2.0** The contract will be distributed electronically by the Commission for execution through DocuSign® upon award.

**3.0** As part of the contract execution process, the contractor shall complete and deliver the original documents/forms listed below, immediately following award of the contract.

Contract Bond Form (with associated Power of Attorney Form)  
Contractor Acknowledgement Form  
Workers Eligibility Verification Affidavit

**4.0** These documents will be provided to the contractor through Bid Express®/BidX® correspondence immediately following Commission award. A checklist with instructions on how to complete these documents will be provided with said award correspondence. In order to expedite contract execution, contractors are encouraged to follow the instructions on the checklist. Inquiries related to completing the listed documents may be directed to the following:

Rodney Braman  
Phone: (573) 751-9253  
Email: [Rodney.Braman@modot.mo.gov](mailto:Rodney.Braman@modot.mo.gov)

**5.0** Potential Bidders without a current MoDOT issued DocuSign® access code shall notify Ryan Martin prior to the bid to determine the necessary steps to establish a Contractor specific access code. If another MoDOT District Office location other than the one listed below is more convenient, please contact Ryan Martin.

Job No.: J8S3133  
Route: D  
County: Greene

CENTRAL OFFICE  
Ryan Martin  
Bidding and Contract Services Engineer  
105 West Capitol  
Jefferson City, MO 65102-0270  
Phone: (573) 526-2923  
Email: [Ryan.Martin@modot.mo.gov](mailto:Ryan.Martin@modot.mo.gov)

EEE. Liquidated Savings Specified

**1.0 Description.** If construction of proposed improvements as shown in the contract and plans for J8S0745, J8S3133, and J8S3153 on Route D, is not completed by December 31, 2027, 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 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 all proposed improvements as shown in the contract and plans for J8S0745, J8S3133 and J8S3153. To qualify for this incentive payment, all work as directed in the contract and on the plans shall be completed, including striping and open to traffic. An incentive payment of \$200,000 will be paid if the work described above is completed by December 31, 2027. The maximum amount paid as liquidated savings will not exceed \$200,000.

**2.1** 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.

**2.2** 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.

JOB SPECIAL PROVISIONS TABLE OF CONTENTS (ROADWAY)

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

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| <br>08/17/2026 12:02:31 PM<br>Paul J. Kronlage - Civil<br>MO PE - 023328 | <b>MISSOURI HIGHWAYS AND<br/>TRANSPORTATION COMMISSION</b><br>105 W. CAPITOL AVE.<br>JEFFERSON CITY, MO 65102<br>Phone 1-888-275-6636                           |
|                                                                                                                                                            | <b>EFK Moen, LLC</b><br>1355 North Highway Drive<br>Suite 200<br>St. Louis, MO. 63026<br><br>Certificate of Authority: 001578<br>Consultant Phone: 314-394-3100 |
|                                                                                                                                                            | If a seal is present on this sheet, JSP's<br>have been electronically sealed and<br>dated.                                                                      |
|                                                                                                                                                            | JOB NUMBERS: J8S3153<br>GREENE COUNTY, MO<br>DATE PREPARED: 07/06/2026                                                                                          |
|                                                                                                                                                            | ADDENDUM DATE:                                                                                                                                                  |

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

JOB  
SPECIAL PROVISION

A. General - Federal JSP-09-02M

**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 2026 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-13-01E

**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.

Job No.: J8S3153  
Route: D  
County: Greene

Notice to Proceed: October 20, 2026  
Contract Completion Date: June 30, 2028

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

| Job Number | Calendar Days | Daily Road User Cost |
|------------|---------------|----------------------|
| J8S0745    | N/A           | \$7,600              |
| J8S3133    | N/A           | \$7,600              |
| J8S3153    | N/A           | \$7,600              |

**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.

**5.0 Liquidated Damages for Winter Months.** Delete Sec 108.8.1.3 (a)  
Liquidated damages for failure to complete the work on time shall not be waived from December 15 to March 15, both dates inclusive.

C. Work Zone Traffic Management JSP-02-06N

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

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

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

## **2.0 Traffic Management Schedule.**

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

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

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

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

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

### **2.5.1 Traffic Safety.**

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

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

### 3.0 Work Hour Restrictions.

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

| <b>When Independence Day falls on:</b> | <b>The Holiday is Observed on:</b> | <b>Halt Lane Closures beginning at:</b> | <b>Allow Lane Closures to resume at:</b> |
|----------------------------------------|------------------------------------|-----------------------------------------|------------------------------------------|
| 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 greater than 15 minutes. Based on this, the contractor's operations will be restricted accordingly unless it can be successfully demonstrated the operations can be performed without a 15 minute 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 work during the following listed hours:

Route D:

6:00 a.m. - 9:00 a.m. and 3:00 p.m. - 6:00 p.m., Monday through Friday  
9:00 a.m. - 1:00 p.m. and 4:00 p.m. - 7:00 p.m., Saturday

**3.4** Any work requiring a reduction in the number of through lanes of traffic shall be completed during nighttime hours. Nighttime hours shall be considered to be 8:00 p.m. to 6:00 a.m. for this project.

**3.5** The contractor shall not alter the start time, ending time, or a reduction in the number of through lanes of traffic or ramp closures without advance notification and approval by the engineer. The only work zone operation approved to begin 30 minutes prior to a reduction in



through traffic lanes or ramp closures is the installation of traffic control signs. Should lane closures be placed or remain in place, prior to the approved starting time or after the approved ending time, the Commission, the traveling public, and state and local police and governmental authorities will be damaged in various ways, including but not limited to, increased construction administration cost, potential liability, traffic and traffic flow regulation cost, traffic congestion and motorist delays, with a resulting cost to the traveling public. These damages are not easily computed or quantified. Therefore, the contractor will be charged with liquidated damages specified in the amount of **\$1,000 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.

**3.5.1** 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.

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

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

|                                                                                         |
|-----------------------------------------------------------------------------------------|
| Springfield Resident Engineer: Brad Gripka 417-895-6720 (Office) or 417-529-2469 (Cell) |
|-----------------------------------------------------------------------------------------|

Job No.: J8S3153  
Route: D  
County: Greene

**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: (417) 895-6868                     |
| Greene County Sheriff's Department: (417) 868-4040          |
| City of Springfield Police Department: (417) 864-1810       |
| City of Springfield Fire Department: (417) 874-2300         |
| MoDOT Customer Service (417) 895-7600                       |
| Emergency Only Numbers                                      |
| 911                                                         |
| (*55 cell phone – Missouri Highway Patrol)                  |
| (417-864-1160 cell – MoDOT Incident Management Coordinator) |

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

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

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

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

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

Kristi Bachman, Project Contact  
MoDOT – Southwest District  
3025 E Kearney St.  
Springfield, MO 65803

Telephone Number: 417-834-7171  
Email: [kristi.bachman@modot.mo.gov](mailto:kristi.bachman@modot.mo.gov)

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

**1.1** All questions concerning the bid document preparation can be directed to the Central Office – Design as listed below.

Telephone Number: (573) 751-2876  
Email: [BCS@modot.mo.gov](mailto:BCS@modot.mo.gov)

**2.0** Upon award and execution of the contract, the successful bidder/contractor shall forward all questions and coordinate the work with the engineer listed below:

Brad Gripka, Resident Engineer  
Southwest District  
2459 North Mayfair  
Springfield, MO 65803

Office Telephone Number: 417-895-6720  
Mobile Telephone Number: 417-834-6976  
Email: [donald.gripka@modot.mo.gov](mailto:donald.gripka@modot.mo.gov)

F. Supplemental Revisions JSP-18-01KK

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

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

- Stormwater Compliance Requirements

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

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

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

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

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

**2.1 Duties of the WPCM:**

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

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

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

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

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

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

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

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

- ***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 or Steel Products.**

The contractor's attention is directed to Title 23 CFR 635.410 *Buy America Requirements*. Where articles, materials or supplies that consist wholly or predominantly of iron or steel or a combination of both 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. Predominantly of iron or steel or a combination of both means that the cost of the iron and steel content exceeds 50 percent of the total cost of all its components. 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** 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.

**106.9.1.2** “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.

**106.9.1.3** 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.

**106.9.1.3.1** 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 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.

**106.9.1.3.2** 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.

**106.9.1.3.3** 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.

**106.9.1.4** 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.

**106.9.2 Buy America Requirements for Construction Materials other than iron or steel products.**

Construction materials mean 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

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

Manufactured products mean articles, materials or supplies that have been processed into a specific form and shape, or combined with other articles, materials or supplies to create a product with different properties than the individual articles, materials or supplies. If an item is classified as an iron or steel product, an excluded material, or other product category as specified by law or in 2 CFR part 184, then it is not a manufactured product. However, an article, material or supply classified as a manufactured product may include components that are iron or steel products, excluded materials, or other product categories as specified by law or in 2 CFR part 184. Mixtures of excluded materials delivered to a work site without final form for incorporation into a project are not a manufactured product.

**106.9.3.1** Produced in the United States, in the case of manufactured products, means:

- (A) For projects obligated on or after October 1, 2025, the product was manufactured in the United States; and
- (B) For projects obligated on or after October 1, 2026, the product was manufactured in the United States and the cost of the components of the manufactured product that are mined, produced, or manufactured in the United States is greater than 55 percent of the total cost of all components of the manufactured product.

**106.9.3.2** (i) With respect to precast concrete products that are classified as manufactured products, components of precast concrete products that consist wholly or predominantly of iron or steel or a combination of both shall meet the requirements of paragraph (b) of this section. The cost of such components shall be included in the applicable calculation for purposes of determining whether the precast concrete product is produced in the United States.

(ii) With respect to intelligent transportation systems and other electronic hardware systems that are installed in the highway right of way or other real property and classified as manufactured

products, the cabinets or other enclosures of such systems that consist wholly or predominantly of iron or steel or a combination of both shall meet the requirements of paragraph (b) of this section. The cost of cabinets or other enclosures shall be included in the applicable calculation for purposes of determining whether systems referred to in the preceding sentence are produced in the United States.

**106.9.4 Waiver for De Minimis Costs for Manufactured and Construction Materials other than iron or steel products.**

“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.

- 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 dynamic 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.

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

**15.0 Bidder's List Quote Summary.** MoDOT is a recipient of federal funds and is required by 49 CFR 26.11 to provide data about its DBE program. All bidders who seek to work on federally assisted contracts must submit data about all DBE and non-DBEs in accordance with Sec 102.7.9. MoDOT will not compare the submitted Bidder's List Quote Summary to any other documents or submittals, pre or post award. All information will be used by MoDOT in accordance with 49 CFR 26.11 for reporting to USDOT and to aid in overall DBE goal setting.

- **Add Sec 102.7.9 to include the following:**

**102.7.9 Bidder's List Quote Summary.** Each bidder shall submit with each bid a summary of all subcontractors, material suppliers, and service providers (e.g. hauling) considered on federally funded projects pursuant to 49 CFR 26.11. The bidder will provide the firm's name, the corresponding North American Industry Classification System (NAICS) code(s) the firm(s) were considered for, and whether or not they were used in the bid. The information submitted should be the most complete information available at the time of bid. The

information shall be disclosed on the Bidder's List Quote Summary form provided in the bidding documents and submitted in accordance with Sec 102.10. Failure to disclose this information may result in a bid being declared irregular.

G. Liquidated Damages Specified

**1.0 Description.** If any lanes of Route D (Sunshine St.) are not open to traffic by 6:00 a.m. each day following a nighttime lane closure, the Commission, the traveling public, and state and local police and governmental authorities will be damaged in various ways, including but not limited to, increased construction administration cost, potential liability, traffic and traffic flow regulation cost, traffic congestion and motorist delay, with its resulting cost to the traveling public. These damages are not reasonably capable of being computed or quantified. Therefore, the contractor will be charged with liquidated damages specified according to the following schedule.

- (a) If any lane or lanes of Route D (Sunshine St.) are closed for any time between 6:00 a.m. to 7:00 a.m., the contractor shall be charged in the amount of \$800 for that hour or any fraction of that hour.
- (b) If any lane or lanes of Route D (Sunshine St.) are closed for any time between 7:00 a.m. to 8:00 a.m., the contractor shall be charged in the amount of \$1,200 for that hour or any fraction of that hour.
- (c) If any lane or lanes of Route D (Sunshine St.) are closed for any time between 8:00 a.m. to 9:00 a.m., the contractor shall be charged in the amount of \$1,000 for that hour or any fraction of that hour.
- (d) If any lane or lanes of Route D (Sunshine St.) are closed for any time between 9:00 a.m. to 10:00 a.m., the contractor shall be charged in the amount of \$1,400 for that hour or any fraction of that hour.
- (e) If any lane or lanes of Route D (Sunshine St.) are closed for any time after 10:00 a.m., the contractor shall be charged in the amount of \$1,400 for the remaining day not to exceed \$5,800 for each full day or fraction of a day that all lanes are not open to traffic.

**1.1** All liquidated damages specified are 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 excess closure time.

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

H. 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:

Job No.: J8S3153  
Route: D  
County: Greene

| <b><u>Utility Name</u></b>                                                                                                                                                                                                     | <b><u>Known Required<br/>Adjustment</u></b> | <b><u>Type</u></b>     |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|------------------------|
| AT&T – Distribution<br>Scott Hall<br>600 St. Louis, Room 630<br>Springfield, MO 65806<br>Phone: 417-849-8265<br>Email: <a href="mailto:sh4949@att.com">sh4949@att.com</a>                                                      | Yes<br>(see section 2.0)                    | Communications         |
| Brightspeed<br>Nick Bridges<br>Phone: 479-238-5515<br>Email: <a href="mailto:nick.bridges@brightspeed.com">nick.bridges@brightspeed.com</a>                                                                                    | None                                        | Communications         |
| City Utilities of Springfield - Electric T&D<br>Seth Day<br>301 E. Central St.<br>Springfield, MO 65801<br>Phone: 417-831-8712<br>Email: <a href="mailto:seth.day@cityutilities.net">seth.day@cityutilities.net</a>            | Yes<br>(see section 3.0)                    | Power                  |
| City Utilities of Springfield - Gas & Water<br>Ryan Jeppson<br>301 E. Central St.<br>Springfield, MO 65801<br>Phone: 417-831-8643<br>Email: <a href="mailto:ryan.jeppson@cityutilities.net">ryan.jeppson@cityutilities.net</a> | Yes<br>(see section 4.0)                    | Gas & Water            |
| City Utilities of Springfield - SpringNet<br>Eric Cochran<br>301 E Central St.<br>Springfield, MO 65801<br>Phone: 417-831-8612<br>Email: <a href="mailto:ecochran@springnet.net">ecochran@springnet.net</a>                    | Yes<br>(see section 5.0)                    | Communications         |
| MoDOT – Signals, Lighting, ITS<br>Joe Dotson<br>2455 N. Mayfair Ave.<br>Springfield, MO 65803<br>Phone: 417-733-0664<br>Email: <a href="mailto:joseph.dotson@modot.mo.gov">joseph.dotson@modot.mo.gov</a>                      | Yes<br>(see section 6.0)                    | Signals, Lighting, ITS |
| City of Springfield – Traffic<br>Brian Doubrava<br>1107 W. Chestnut Expressway<br>Springfield, MO 65802<br>Phone: 417-864-1163<br>Email: <a href="mailto:bdoubrava@springfieldmo.gov">bdoubrava@springfieldmo.gov</a>          | None                                        | Signals/ITS            |

Job No.: J8S3153  
Route: D  
County: Greene

City of Springfield – Clean Water Services  
Matt Taylor  
840 Boonville Ave.  
Springfield, MO 65802  
Phone: 417-864-1934  
Email: [mtaylor@springfieldmo.gov](mailto:mtaylor@springfieldmo.gov)

Yes  
(see section 7.0)

Sewer

Bluebird  
Mark Bower  
9201 Ward Parkway, Suite 300  
Kansas City, MO 64144  
Phone: 417-708-3202  
Email: [mark.bower@bluebirdfiber.com](mailto:mark.bower@bluebirdfiber.com)

None  
(see section 8.0)

Communications

Lumen  
Kimberly Singleton, Engineering Manager  
Phone: 419-631-4683  
Email: [kimberly.singleton@lumen.com](mailto:kimberly.singleton@lumen.com)  
Olsson (Lumen's contract engineer)  
Sandra Munoz-Cabuya  
7301 W. 133<sup>rd</sup> Street, Suite 200  
Overland Park, KS 66213  
Phone: 913-748-2646  
Email: [smunozcabuya@olsson.com](mailto:smunozcabuya@olsson.com)

None  
(see section 8.0)

Communications

Mediacom  
Kyle Keller  
1533 S. Enterprise Ave.  
Springfield, MO 65804  
Phone: 417-496-8577  
Email: [kkeller@mediacomcc.com](mailto:kkeller@mediacomcc.com)

None

Communications

Verizon  
Bryan Burger  
10740 Nall Ave., Suite 400  
Overland Park, KS 66211  
Phone: 816-204-4494  
Email: [bryan.burger@verizon.com](mailto:bryan.burger@verizon.com)

None

Communications

Windstream  
Kelly Wingfield  
3540 SW 61<sup>st</sup> Street  
Des Moines, IA 50321  
Phone: 515-559-4031  
Email: [kelly.wingfield@windstream.com](mailto:kelly.wingfield@windstream.com)

None

Communications

**1.1 Disclaimer and Verification of Utility Information.** 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 Overhead Primary Electric.** Various utilities listed above have overhead lines within the project limits in the vicinity of the Contractor's work. The contractor shall comply with the Missouri Overhead Powerline Safety Act; this statute makes it illegal for an unauthorized person or entity to work or bring equipment within 10 feet of a high voltage line that has not been covered or de-energized. The purpose of the Missouri Overhead Powerline Safety Act is to ensure the safety of the public when working around overhead power lines. If the contractor needs line cover when working near a primary powerline, then the contractor shall notify that utility owner a minimum of 14 days in advance of needing line cover. Most power providers perform this service free of charge for municipally driven projects. The contractor shall be responsible for any damage to the overhead lines caused by their operations. There will be no direct payment for compliance to this specification.

## **2.0 AT&T Distribution.**

**2.1 Elevation Adjustments.** AT&T has numerous existing manholes and handholes along the Sunshine corridor. Some of these facilities will require elevation adjustments to match the new sidewalk grade. The known locations are listed below. The contractor is advised that there might be other locations where elevation adjustments may be necessary to accommodate the proposed roadway improvements. AT&T's contractor will make the required elevation adjustment during construction. The roadway contractor shall notify AT&T a minimum of 3 weeks in advance of needing the adjustment made on the project. The roadway contractor shall also be responsible for establishing the finished sidewalk grades for AT&T's contractor.

Sta 6+46, 46' Lt (Manhole)  
Sta 55+73, 47' Rt (Handhole)  
Sta 68+23, 64' Lt (Handhole)

**2.2 In-Line Pole.** AT&T has a pole on the north side of Sunshine near Sta 56+24 that will be in conflict with the relocated entrance to 2631 E. Sunshine. AT&T plans to install a new in-line pole approximately 30ft to the west to mitigate the impact. AT&T anticipates the work to be completed by mid-summer. Once AT&T has moved their facilities to the new pole, Mediacom will also need to transfer.

**3.0 City Utilities – Electric (Whiteway Lighting).** City Utilities has impacts to 3 lighting structures on the north side of Sunshine towards the east end of the project. CU intends to renew the lighting circuit from approximate Sta 4+56 to the intersection at Luster. By agreement, when whiteway lighting is impacted by a municipal project, City Utilities will provide a lighting design to be included in the roadway contract. The lighting design is only for foundation and conduit installation along with any necessary secondary risers. Once these items have been installed by the roadway contractor, CU crews will provide and install the wire, poles, and luminaires. CU's plan (Drawing 93404) for conduit and foundations is included as part of the roadway contract. The bid items for the whiteway work are included with the other roadway bid item. The whiteway items are shown as 99 numbers in the bid book but all new installations are standard CU bid items. The roadway contractor will be required to provide and install these items in accordance to City Utilities' standard drawing located at: <https://www.cityutilities.net/business/construction/>. The contractor shall coordinate construction activities with CU's Contract Inspector, Corey Bryan (417-450-7347).

#### **4.0 Ctiy Utilities – Gas and Water.**

**4.1 Coordination with City Utilities Gas.** There are several existing gas valves along the Sunshine corridor that may require an elevation adjustment on the cover to meet the new sidewalk/approach grade. The contractor shall be responsible for coordinating the necessary elevation adjustments with Rudy Schroeder (417-225-2250) in CU Gas operations. City Utilities has requested a minimum of two weeks advance notice for scheduling purposes. The contractor shall be responsible for removing any concrete around the existing valve and establish the necessary height adjustment for CU crews. There will be no direct payment for compliance to this specification.

**4.2 Coordination with City Utilities Water.** There are several existing water valves and water meters along the Sunshine corridor that may require an elevation adjustment on the cover to meet the new sidewalk/approach grade. The contractor shall be responsible for coordinating the necessary elevation adjustments with Jeff Bolin (417-619-3475) in CU Water operations. City Utilities has requested a minimum of two weeks advance notice for scheduling purposes. The contractor will be responsible for removing any concrete around the existing valve/meter and establish the necessary height adjustment for CU crews. There will be no direct payment for compliance to this specification.

**4.3 3351 E. Sunshine.** The proposed roadway improvements call for new sidewalk in front of 3351 E. Sunshine. CU has a 16" DI water main running parallel to Sunshine just north of the existing curb. There are no anticipated impacts to this water main other than the service meter which is addressed in section 4.2 above. CU also has a 6" steel gas main running parallel to Sunshine near the north R/W line. Recent potholing confirms this main will be exposed by the proposed grading for the new sidewalk. CU intends to lower this gas main during construction. The roadway contractor shall contact CU a minimum of 3 weeks in advance of starting the sidewalk construction in this area. The roadway contractor shall be responsible for removing the existing concrete surface (sidewalk and paved approach) through the limits of the gas lowering. The contractor shall also provide finished grade elevation for CU lowering crews.

**4.4 Water Renewal.** The contractor is advised that CU will be performing a water renewal on Sunshine between Oak Grove and Meadowview. The renewal will be in private easement on the north side of Sunshine, north of the existing R/W. CU intends to perform this renewal work at the same time as the ADA work to minimize disruption to the adjacent properties. With the exception of retiring their existing main, all of CU's work will be performed within the new easement. The contractor shall coordinate the sidewalk work in this area with CU so that proper traffic control can be maintained at all times.

**5.0 SpringNet.** SpringNet has existing handholes on the Sunshine corridor. Some of these facilities will require elevation adjustments to match the new sidewalk grade. The known locations are listed below. The contractor is advised that there might be other locations where elevation adjustments may be necessary to accommodate the proposed roadway improvements. SpringNet's contractor will make the required elevation adjustment during construction. The roadway contractor shall notify SpringNet a minimum of 3 weeks in advance of needing the adjustment made on the project. The roadway contractor shall also be responsible for establishing the finished sidewalk grades for SpringNet's contractor.

Sta 6+32, 42' Lt (Handhole)  
Sta 16+07, 36' Lt (Handhole)  
Sta 18+47, 38' Lt (Handhole)  
Sta 60+72, 36' Lt (Handhole)

**6.0 MoDOT Signals, Lighting, ITS.** The proposed revisions and additions to MoDOT's signals and ITS equipment are included as part of the roadway contract. The contractor shall install and/or modify the equipment as shown in the plans and job special provisions. All cost associated with this work shall be completely covered in the contractor's submitted bid prices for the signal and ITS items included in the roadway contract.

**7.0 City of Springfield – Sanitary Sewer.** There are eight locations within the project limits where existing sanitary sewer manholes will need elevation adjustment on the lids to accommodate the proposed grade. Those locations are shown below. The contractor will be responsible for making these elevation adjustments as part of the roadway contract under bid item 604-99.02, per each. The roadway contractor shall be responsible for having their adjustment plan approved by either Paul Williams (417-838-0570) with the City of Springfield, Clean Water Service, prior to making any adjustment.

Sta 13+24, 35' Lt (P21SW073)  
Sta 15+55, 35' Lt (P21SW074)  
Sta 18+38, 36' Lt (P21SW079)  
Sta 19+86, 36' Lt (P21SW080)  
Sta 20+34, 36' Lt (P21SW081)  
Sta 48+40, 34' Rt (Q21NE002)  
Sta 50+78, 34' Rt (Q21NE001)  
Sta 56+07, 35' Rt (Q22NW055)

**8.0 Bluebird/Lumen.** Bluebird and Lumen did a parallel installation in 2019 along the entire project limits. The installation consists of a 5 conduit package pulled back through the same bore. Lumen owns 3 of these conduits and Bluebird owns the remaining 2 conduits. The parallel installation is along the north side of Sunshine from the west project limits to approximate Sta 12+88 where it switches to the south side of Sunshine and extends east to the east project limits. Both Bluebird and Lumen have handholes in close proximity to each other along the corridor to establish conduit ownership. There are no known locations where these handholes are in direct conflict with the proposed ADA improvement associated with this project.

**8.1 Bluebird Handhole.** Bluebird has a handhole on the north side of Sunshine near Sta 126+81 that will need to be adjusted to match the new sidewalk grade. This handhole is a lateral terminus point tied to their backbone on the south side of Sunshine. The contractor is advised that there might be other locations where elevation adjustments may be necessary to accommodate the proposed roadway improvements. Bluebird's contractor will make the required elevation adjustment during construction. The roadway contractor shall notify Bluebird a minimum of 3 weeks in advance of needing the adjustment made on the project. The roadway contractor shall also be responsible for establishing the finished sidewalk grades for Bluebird's contractor.

I. Quality Management NJSP-15-22

**1.0 Quality Management.** The contractor shall provide Quality Management as specified herein to ensure the project work and materials meets or exceeds all contract requirements.

**1.1** The contractor shall provide Quality Control (QC) of the work and material, as specified herein, to ensure all work and material is in compliance with contract requirements. QC staff shall perform and document all inspection and testing. The QC inspectors and testers may be employed by the contractor, sub-contractor, or a qualified professional service provided by the contractor.

**1.2** The engineer will provide Quality Assurance (QA) inspection. The role of QA is to verify the performance of QC and provide confidence that the product will satisfy given requirements for quality.

**1.3** The contractor shall designate a person to serve as the project Quality Manager (QM). The QM shall be knowledgeable of standard testing and inspection procedures for highway and bridge construction, including a thorough understanding of the Missouri Standard Specifications. The QM shall be responsible for the implementation and execution of the Quality Management Plan and shall oversee all QC responsibilities, including all sub-contract work. The QM shall be the primary point of contact for all quality related issues and responsibilities, and shall ensure qualified QC technicians and inspectors are assigned to all work activities. The QM should be separate from the manager of the work activities to effectively manage a QC program.

**1.4** Any QC personnel determined in sole discretion of the engineer to be incompetent, derelict in their duties, or dishonest, shall at a minimum be removed from the project. Further investigation will follow with a stop work notification to be issued until the contractor submits a corrective action report that meets the approval of the engineer.

**2.0 Quality Management Plan.** The contractor shall develop, implement and maintain a Quality Management Plan (QMP) that will ensure the project quality meets or exceeds all contract requirements, and provides a record for acceptance of the work and material. A sample QMP, which shows minimum requirements, is provided on the MoDOT website at: [www.modot.org/quality](http://www.modot.org/quality).

**2.1** The QMP shall address all QC inspection and testing requirements of the work as described herein. A draft QMP shall be submitted to the Resident Engineer for review at least two weeks prior to the pre-construction conference. An approved QMP is required at least two weeks prior to the start of work, unless otherwise allowed by the engineer. Physical work on the project shall not begin prior to approval of the QMP by the engineer.

**2.2** The approved QMP shall be considered a contract document and any revisions to the QMP will require approval from the engineer.

**2.3** The following items shall be included in the Quality Management Plan:

- a) Organizational structure of the contractor's project management, production staff, and QC staff, specific to this project.
- b) Name, qualifications and job duties of the Quality Manager.
- c) A list of all certified QC testers who will perform QC duties on the project, including sub-contract work, and the tests in which they are certified.
- d) A list of all QC inspectors who will perform QC inspection duties on the project, including sub-contract work, and the areas of inspection that they will be assigned.



- e) A procedure for verifying documentation is accurate and complete as outlined in Section 3.
- f) A procedure describing QC Inspections as outlined in Section 4.
- g) A procedure describing QC Testing, as outlined in Section 5, including a job specific Inspection and Test Plan (ITP).
- h) A procedure describing Material Receiving as outlined in Section 6.
- i) A list of Hold Points that are not included in the checklist forms, as outlined in Section 8.
- j) A procedure for documenting and resolving Non-Conforming work as outlined in Section 9.
- k) A procedure for tracking and documenting revisions to the QMP.
- l) A list of any approved changes to the Standard Specifications or ITP, including a reference to the corresponding change order.
- m) Format for the Weekly Schedule and Work Plans as outlined in Section 10, including a list of activities that will require pre-activity meetings.

**3.0 Project Documentation.** The contractor shall establish a Document Control Procedure for producing and uploading the required Quality Management documents to a MoDOT-provided server. The document management software used by MoDOT is Microsoft SharePoint®. Contractors do not need to purchase Microsoft SharePoint®, however, it is recommended that new users acquire some basic training to better understand how to use this software. MoDOT does not provide the software training, but there are several online vendors who do. Contractors are required to use Microsoft Excel® and Microsoft Word® with some documents.

**3.1** The contractor shall utilize the file structure and file naming convention provided by MoDOT. A sample file structure is available on the MoDOT website.

**3.2** Documents (standard forms, reports, and checklists) referenced throughout this provision are considered the minimum documentation required. They shall be obtained from MoDOT at the following web address: [www.modot.org/quality](http://www.modot.org/quality). The documents provided by MoDOT are required to be used in the original format, unless otherwise approved by the engineer. Any alteration to these forms shall be approved by the engineer.

**3.3** Timely submittal of the required documents to the MoDOT document storage location is essential to ensure payment can be processed for the completed work. Submittal of the documents is required within 12 hours of the work shift that the work was performed, or on a document-specific schedule approved by the engineer and included in the QMP.

**3.4** The contractor shall establish a verification procedure that ensures all required documents are submitted to the engineer within the specified time, and prior to the end of each pay period for the work that was completed during that period. Payment will not be made for work that does not include all required documents. Minimum documents that might be required prior to payment

include: Test Reports, Inspection Checklists, Materials Receiving Reports, and Daily Inspection Reports.

**3.5** The contractor shall perform an audit at project closeout to ensure the final collection of documents is accurate and complete.

**4.0 Quality Control Inspections.** The QMP shall identify a procedure for performing QC inspections. QC inspections shall be performed for all project activities to ensure the work is in compliance with the contract, plans and specifications.

**4.1** The QM shall identify the QC inspectors assigned to each work activity. The QC inspectors shall inspect the work to ensure the work is completed in accordance with the plans and specifications, and shall document the inspection by completing the required inspection checklists, forms, and reports provided by MoDOT. Depending on the type of work, the checklists may be necessary daily, or they may follow a progressive work process. The frequency of each checklist shall be stated in the QMP. The contractor may propose alternate versions of checklists that are more specific to the work.

**4.2** A Daily Inspection Report (DIR) is required to document pertinent activity on the project each day. This report shall include a detailed diary that describes the work performed as well as observations made by the inspection staff regarding quality control. The report shall include other items such as weather conditions, location of work, installed quantities, tests performed, and a list of all subcontractors that performed work on that date. The report shall include the full name of the responsible person who filled out the report and shall be digitally signed by an authorized contractor representative.

**4.3** External fabrication of materials does not require further QC inspection if the product is currently under MoDOT inspection or an approved QC/QA program. QC inspection and testing required in the production of concrete for the project shall be the responsibility of the contractor.

**4.4** The contractor shall measure, and document on the DIR, the quantity for all items of work that require measurement. Any calculations necessary to support the measurement shall be included with the documentation. The engineer will verify the measurements prior to final payment.

**5.0 Quality Control Testing.** The QMP shall identify a procedure for QC testing. The contractor shall perform testing of the work at the frequency specified in the Inspection and Test Plan (ITP).

**5.1** MoDOT will provide a standard ITP and the contractor shall modify it to include only the items of work in the contract, including adding any Job Special Provision items. The standard ITP is available on the MoDOT website at [www.modot.org/quality](http://www.modot.org/quality). The contractor shall not change the specifications, testing procedures, or the testing frequencies, from the standard ITP without approval by the engineer and issuance of a change order.

**5.2** Test results shall be recorded on the standard test reports provided by the engineer, or in a format approved by the engineer. Any test data shall be immediately provided to the engineer upon request at any time, including prior to the submission of the test report.

**5.3** The contractor shall ensure that all personnel who perform sampling and/or testing are certified by the MoDOT Technician Certification Program or a certification program that has been approved by MoDOT for the sampling and testing they perform.

**5.4** If necessary, an independent third party will be used to resolve any significant discrepancies between QC and QA test results. All dispute resolution testing shall be performed by a laboratory that is accredited in the AASHTO Accreditation Program in the area of the test performed. The contractor shall be responsible for the cost to employ the third party laboratory if the third party test verifies that the QA test was accurate. The Commission shall be responsible for the cost if the third party test verifies that the QC test was accurate.

**6.0 Material Receiving.** The QMP shall identify a procedure for performing material receiving. Standard material receiving forms will be provided by the engineer.

**6.1** The procedure shall address inspections for all material delivered to the site (excluding testable material such as concrete, asphalt, aggregate, etc.) for general condition of the material at the time it is delivered. The material receiving procedure shall record markings and accompanying documentation indicating the material is MoDOT accepted material (MoDOT-OK Stamp, PAL tags, material certifications, etc.).

**6.2** All required material documentation must be present at the time of delivery. If the material is not MoDOT accepted, the contractor shall notify the engineer immediately and shall not incorporate the material into the work.

**7.0 Quality Assurance.** The engineer will perform Quality Assurance inspection and testing (QA) to verify the performance of QC inspection and testing. The frequency of the QA testing will be as shown in the ITP, but may be more frequent at the discretion of the engineer. The engineer will record the results of the QA testing and inspection and will inform the contractor of any known discrepancies.

**7.1** QA is responsible for verifying the accuracy of the final quantity of all pay items in the contract. This includes taking measurements on items that require measurement and other items that are found to have appreciable errors.

**7.2** QA inspection and test results shall not be used as a substitute for QC inspection and testing.

**7.3** QA will be available for Hold Point inspections at the times planned in the Weekly Schedule. The inspections may be re-scheduled as needed, but a minimum 24-hour advance notification from the contractor is required unless otherwise approved by the engineer.

**8.0 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 the succeeding work depends on a QA review of the preceding work before work can continue.

**8.1** A list of minimum Hold Points will be provided by the engineer and shall be included in the QMP. The engineer may make changes to the Hold Point list at any time.

**8.2** Prior to all Hold Point inspections, QC shall provide the engineer with the Daily Inspection Reports, Inspection Checklists, Test Reports, and Material Receiving Reports for the work performed leading up to the Hold Point. 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.

**9.0 Non-Conformance Reporting.** Non-conformance reports shall be issued by the contractor for work that does not meet the contract requirements. Non-conforming work includes work, testing, materials and processes that do not meet contract requirements. The contractor shall establish a procedure for identifying and resolving non-conforming work as well as tracking the status of the reports.

**9.1** Contractor QC staff or production staff should identify non-conforming work and document the details on the Non-Conformance Report form provided by MoDOT. QA staff may also initiate a non-conformance report.

**9.2** In-progress work that does not meet the contract requirements may not require a non-conformance report if production staff is aware of the issue and corrects the problem during production. QC or QA may issue a non-conformance report for in-progress work when documentation of the deficiency is considered beneficial to the project record.

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

**9.4** For recurring non-conformance work of the same or similar nature, a written Corrective Action Request will be issued by QC or QA. The contractor shall then establish a procedure for tracking the corrective action from issuance of the request to implementation of the solution. Approval from the engineer is required prior to implementation of the proposed corrective action. The contractor shall notify the engineer after the approved corrective action has been implemented.

**10.0 Work Planning and Scheduling.** The contractor shall include Quality Management in all aspects of the work planning and scheduling. This shall include providing a Weekly Schedule, a Work Plan for each work activity, and holding pre-activity meetings for each new activity.

**10.1** A Weekly Schedule shall be provided to the engineer each week that outlines the planned project activities for the following two-week period. This schedule shall include all planned work, identification of all new activities, traffic control events, and requested Hold Point inspections for the period. Planned quantity of materials, along with delivery dates should also be included in the schedule.

**10.2** A Work Plan shall be submitted to the engineer at least one week prior to the pre-activity meeting. The Work Plan shall include the following: a safety plan, list of materials to be used, work sequence, defined responsibilities for QC testing and inspection personnel, and stages of work that will require Hold Point inspections.

**10.3** A pre-activity meeting is required prior to the start of each new activity. The purpose of this meeting is to discuss details of the Work Plan and schedule, including all safety precautions. Those present at the meeting shall include: the production supervisor for the activity, the Quality Manager, QC inspection and testing staff, and QA. The Quality Manager will review the defined responsibilities for QC testing and inspection personnel and will address any quality issues with the production staff. Attendees may join the meeting in person or by phone or video conference.

**11.0 Basis of Payment.** Payment for all costs associated with developing, implementing and maintaining the Quality Management Plan, providing Quality Control inspection and testing, and all other costs associated with this provision, will be considered included in the unit price of each contract item. No direct pay will be made for this provision.

J. 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.

K. ADA Material Testing Frequency Modifications JSP-23-01

**1.0 Description.** This provision revises the Inspection and Testing Plan (ITP) for the construction of ADA compliant features to better match the nature of the work. The Quality Control (QC) testing frequency for the Sections identified below are to be revised as specified.

**2.0 Compaction Test on Base Rock Under Sidewalk, Curb Ramps and Paved Approaches. (Revises ITP Sec 304.3.4)** The required test frequency will be one per 600 tons.

**3.0 Gradation Test on Base Rock Under Sidewalk, Curb Ramps and Paved Approaches. (Revises ITP Sec 304.4.1)** The required frequency will be one per 500 tons.

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

**5.0 Concrete Median, Median Strip, Sidewalk, Curb Ramps, and Curb. (Revises ITP Sec 608)** The required frequency will be 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. (ITP Sec 608)** The required testing of one test from the first truckload per day and each 100 CUYDs for air and slump will remain per ITP. 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 ITP 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 requirements.

L. ADA Compliant Moveable Barricade

**1.0 Description.** The work shall consist of providing moveable barricades to satisfy the requirements of the pedestrian traffic control plans as shown in the bidding documents. The contractor will be responsible for moving the pedestrian barricades to coincide with their planned order of work.

**2.0 Construction Requirements.** The contractor shall use a moveable barricade that meets the requirements as established by the ADA. The pedestrian barricades shall be of self-supporting type having a minimum length of 6 feet per unit. The face of the barricade shall not extend into adjacent sidewalk considered open for pedestrian use. The contractor will be responsible for setting and maintaining the pedestrian barricades until all the proposed improvements have been constructed.

**3.0 Method of Measurement.** Measurement for ADA Compliant Moveable Barricade will be made per each for each 6 feet (min.) unit provided.

**4.0 Basis of Payment.** Payment for all work necessary to fulfill the requirements noted above will be considered completely covered in the contract unit price for Pay Item No. 616-99.02 ADA Compliant Moveable Barricade, per each. No direct payment will be made for any necessary relocation of the ADA Compliant Moveable Barricade.

M. Linear Grading for ADA Facilities - SW

**1.0 Description.** This work shall consist of altering the existing roadside features to the required grade and cross sections shown on the plans (if applicable), or to comply with typical sections, running slopes, drop-off and side-slope standards, consistent with the guidelines set forth in the Americans with Disabilities Act (ADA). This work shall be in accordance with Sections 202 and 207 and accompanying provisions except as modified herein.

**2.0 Construction Requirements.** The roadside shall be brought to the required grade and cross section as established in Section 1.0 of this provision, to a uniform appearance, free of sharp breaks or humps. Minor deviations will be allowed, to take advantage of favorable topography, as approved by the engineer.

**2.1** The contractor shall remove all existing roadside improvements necessary to facilitate the new sidewalk and curb ramp construction, along with any other roadside removal items at, or adjacent to the pedestrian pathway, as noted in the plans or as approved by the engineer. This shall include the removal and/or saw cutting at existing raised islands or median strips to construct the pedestrian pathway. The contractor shall pay special care to existing utility facilities to be used in place or relocated by others.

**2.2** The contractor shall be responsible for all excavation and embankment work necessary to facilitate construction of new ADA compliant facilities; normally consisting of subgrade and subsequent finished grading for sidewalks, curbs, curb ramps; and may include miscellaneous grading work for items such as ditches, entrances, paved approaches, driveways and pipes, at or adjacent to proposed new sidewalk facilities.

**2.3** By this provision, it may be necessary to excavate, stockpile, and haul some material within the project limits. Due to staging and/or Right-of-Way constraints, it may be necessary to waste unusable material off Right-of-Way, and/or haul a replacement volume of material back to achieve the desired grades.

**2.4** All removals of Portland or Asphaltic Concrete performed under this provision will require saw-cutting a neat/clean edge along the removal lines at no direct pay, unless otherwise provided for in the contract.

**3.0 Method of Measurement.** Measurement of Linear Grading for ADA Facilities will be made along the length of the new sidewalk and/or curb ramp installed, along each side of the roadway where sidewalk work is to be performed, and along the centerline length of each driveway, entrance, or paved approach as shown on the plans. Measurement will be made to the nearest 1-foot for each sidewalk work area, totaled, and paid to the nearest 1-foot for final pay. Final field measurement will not be required except where appreciable errors are found, or authorized changes have been made.

**4.0 Basis of Payment.** The accepted quantities of Linear Grading for ADA Facilities will be paid for at the contract unit price for item 207-99.03, Linear Grading for ADA Facilities, Linear Foot, and will be considered as full compensation for all labor, equipment, material, waste fees, disposal agreements, material acquisition, or other construction costs involved to complete the described work.

**4.1** No direct payment will be made for "REMOVAL OF IMPROVEMENTS" associated with the removal and disposal of sidewalks, curbs, curb ramps, entrances, and other incidentals required for construction of the new sidewalk and/or curb ramps.

N. Curb Ramps and Sidewalk – SW

**1.0 Description.** Construction of concrete curbs, aprons, curb ramps, transition areas, sidewalk and landings shall be in accordance with applicable portions of Sections 608 & 609 of the Standard Specification and Standard Plans for Highway Construction 608.10, as shown on the plans, and meet ADA requirements.

**2.0 Construction Requirements.** This work shall include, but is not limited to, sidewalk construction including landings, joint construction, aggregate base, compaction, apron modifications, transition area, curb ramp construction, Type S Curb or Type A Curb installation (as required), tie bars or dowel bars (as required), clean-up, etc. for each location shown on the plans.

The following requirements shall be applicable to construction of this project:



- Existing curb, curb and gutter, sidewalk, shoulders, etc. that are adjacent to a designated curb ramp and/or sidewalk improvement area that is damaged during construction shall be replaced/repared to match existing materials and condition.
- Variable height curb along the roadside may be constructed monolithic or separate depending on construction operations. Integral curb shall be doweled to the existing gutter or pavement. - Integral or Type S-curb shall be used along the existing right-of-way when constructing curb ramps as shown on the plans. The cost of the curb is included in pay limits of the curb ramp.
- The transition area shall be 8" thick and tied to the existing roadway pavement and existing paved approach or sidewalk it is matching.
- Curing compound for all concrete construction shall be a clear or translucent color. The white pigmented option or other colored compound will not be allowed.
- Adjacent grass areas, landscaping, irrigation systems (lines, sprinkler heads, control boxes), pavement, etc. disturbed by curb ramp or sidewalk construction shall be repaired or replaced to match or exceed existing conditions.
- Sod quantities are included for adjacent areas. More or less sod may be required depending on actual field conditions.

**3.0 Method of Measurement.** Curb ramps and concrete sidewalk will be measured to the nearest 1/10 square yard. Measurement of incidental items required to complete all aspects of construction for the above noted items at each new curb ramp and sidewalk location will not be made individually unless specified elsewhere in the contract.

**4.0 Basis of Payment.** All costs incurred by the contractor by reason of compliance to satisfy the above requirements will be considered incidental to and completely covered by the contract unit price for each of the pay items within the contract.

O. Sidewalk Manicuring

**1.0 Description.** This work shall consist of removing any vegetation, soil buildup, and/or debris from all existing sidewalks and adjacent areas next to the sidewalks to eliminate any obstacles or obstructions within the project limits.

**2.0 Construction Requirements.** Any vegetation, soil buildup, and/or debris covering and/or encroaching on the existing sidewalks shall be completely removed within the width of the existing sidewalk as directed by engineer. A landscaping edger with a vertical blade shall be used along the sidewalk to establish a clean cut between the sidewalk and grass area. All tree limbs or other vegetation encroaching onto or over the sidewalk shall be removed to provide a minimum overhead clearance of at least 80 inches from the elevation of the existing sidewalk and shall provide a horizontal clearance to at least the edge of the existing sidewalk.

**2.1** All soil material removed from the sidewalks may be evenly spread out on the right of way as approved by engineer. Any tree limbs or vegetative clippings removed by the contractor shall be disposed of off the right of way at the contractor's expense.

**3.0 Method of Measurement.** Measurement will be made along the edge of the sidewalk to the nearest linear foot. An additional quantity was added in quantities for areas that may need manicuring as approved by engineer. This quantity may be underrun if not used as directed by the engineer.

**4.0 Basis of Payment.** Payment for sidewalk manicuring will be paid for at the contract unit price for Pay Item No. 202-99.03, Sidewalk Manicuring, per linear foot.

P. Sidewalk Joint Grinding

**1.0 Description.** This work shall consist of providing a smooth transition for the joint between two existing sidewalk panels or other surfaces used for a pedestrian thoroughfare. The joint may be between but not limited to surfaces connecting pavement, sidewalks, transition areas, ramps, and/or landings and other locations as directed by the engineer.

**2.0 Construction Requirements.**

**2.1** Any joint between two existing sidewalk surfaces having a vertical height differential of less than one quarter (1/4) inch shall be considered ADA compliant. If the vertical height differential falls between 1/4 inch and 1/2 inch, then the contractor shall grind the high side down on a bevel not to exceed a 2:1 (H:V) slope so that the bevel begins at the lower panel elevation. For joints having a differential height greater than 1/2 inch, then the contractor shall grind the high side down on a bevel not to exceed a 12:1 (H:V) slope so that the bevel begins at the lower panel elevations.

**2.2** All ground surfaces shall be smooth and planar meeting the minimum ADA requirements.

**2.3** Any surface areas damaged by the contractor during the grinding operations shall be repaired and/or replaced solely at the contractor's expense.

**3.0 Method of Measurement.** Measurement will be made along the centerline of the joint to the nearest linear foot. An additional quantity was added in quantities for areas that may need grinding as approved by engineer. This quantity may be underrun if not used as directed by the engineer.

**4.0 Basis of Payment.** Payment for all work necessary to fulfill the requirements noted above will be considered completely covered in the contract unit price for Pay Item No. 622-99.03, Sidewalk Joint Grinding, per linear foot.

Q. Disposition of Existing Signal, Lighting and Network Equipment

**1.0 Description.** This work shall consist of the disposition of existing signal, lighting, and network equipment as shown on the plans and delivering it to the specified MoDOT maintenance lot.

**2.0 Construction Requirements.** All controllers, cabinets, cabinet equipment, network equipment, DMS equipment, antennas, radios, modems, and other equipment noted in the plans shall be removed by the contractor and delivered to the following location:

Springfield Maintenance Lot  
2455 N. Mayfair  
Springfield, MO 65803

**2.1** The contractor shall notify the Commission's representative 24 hours prior to each delivery by calling the contact listed below.

Joe Dotson, Urban Traffic Supervisor  
Phone: (417) 895-7599 or (417) 733-0664

**2.2** The contractor shall exercise reasonable care in the handling of the equipment during the removal and transportation. Should any of the equipment be damaged by the contractor's negligence, it shall be replaced at the contractor's expense. Delivery shall be within 2 working days of removal. All items returned shall be tagged with the date removed, project number and location/intersection.

**2.3** Equipment shown on the plans for removal not listed in section 2.0 above shall become the property of the contractor and removed from the project.

**3.0 Basis of Payment.** Payment for removal, handling and transportation of all equipment specified will be considered completely covered by the contract unit price for 202-20.10, Removal of Improvements, per lump sum.

R. Remote Pushbutton Post

**1.0 Description.** This work shall consist of installing pushbutton posts at the locations shown on the plans.

**2.0 Construction Requirements.**

**2.1** The post shaft shall be schedule 40 aluminum pipe that is 48 inches in length with a 4 inch diameter (4.5-inch O.D).

**2.2** The post shall be installed on top of a breakaway pedestal base mounted to a foundation in the sidewalk. The sidewalk foundation shall be constructed as part of the sidewalk and have an 18-inch diameter and 12-inch depth. The breakaway pedestal base shall be mounted to the sidewalk foundation using proper sized anchor bolts according to manufacturer's instructions.

**2.3** A slip form connection shall be provided on the wiring in the breakaway pedestal base to sever the connection in the event that the pushbutton post is struck by a vehicle. Access to wiring shall be provided through an access panel in the breakaway pedestal base as well as the pipe post cap. The cap shall be secured and weather proofed when it is not opened for access.

**2.4** The final product shall meet or exceed Americans with Disabilities Act (ADA) requirements for pedestrian facilities.

**3.0 Method of Measurement.** Final measurement of remote pushbutton posts will be made per each. This shall include the dome cap, post, breakaway base, anchor rods, concrete forming tube, concrete, removal of existing concrete medians, median strips or concrete pavement, and all miscellaneous appurtenances to construct the post as shown on the plans.

**4.0 Basis of Payment.** Payment for furnishing all labor, equipment, materials, and tools necessary to place remote pedestrian pushbutton posts will be completely covered by the contract unit price for:

| Pay Item Number | Type / Description     | Unit |
|-----------------|------------------------|------|
| 902-99.02       | Remote Pushbutton Post | Each |

S. Pedestrian Pushbutton Extension

**1.0 Description.** This work shall consist of installing new pushbutton extensions to meet Americans with Disabilities Act (ADA) requirements at the locations shown on the plans and in accordance with Sec 902 and 1092.

**2.0 Construction Requirements.** Pushbutton extensions shall be commercially available or equivalent design as approved by the engineer before they are ordered or manufactured.

**2.1** Various extension lengths and heights shall be necessary to meet ADA requirements. The contractor shall be responsible for determining the length and height of each extension needed to meet ADA requirements. The extension shall be modified as needed to meet requirements of Sec 902 and 1092.

**3.0 Method of Measurement.** Measurement will be made per each.

**4.0 Basis of Payment.** All labor, equipment and materials required to install pushbutton extensions will be considered completely covered by Pay Item No. 902-99.02, Pedestrian Pushbutton Extension, per each.

T. 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.

U. Option of Accelerated PCCP Concrete on Paved Approaches

**1.0 Description.** The contractor has the option of using an accelerated Portland cement concrete pavement (PCCP) for use in paved approaches as shown on the plans or as approved by the engineer.

**2.0 Construction Requirements.** All materials, mixture and placement requirements shall be in accordance with all applicable portions of Section 501, 502, and 613, except as specified herein.

**2.1** The concrete mixture shall obtain a compressive strength of 3,500 pounds per square inch prior to opening to traffic. A non-chloride accelerator will be allowed as approved by the engineer.

**3.0 Method of Measurement.** No measurement of accelerated PCCP will be made.

**4.0 Basis of Payment.** No direct payment for accelerated PCCP will be made. Any accelerated PCCP concrete used in paved approaches will be considered included in and completely covered by the unit price for Paved Approach, 8 in., Item No. 608-50.08, Sq. Yd.

V. Use of Right-of-Way, Permanent Easements, and Temporary Construction Easements

**1.0 Description.** The Commission has acquired right-of-way, permanent easements, and temporary construction easements for the contractor to use during construction on several commercial properties. The contractor shall not to disturb any existing trees, landscaping, sprinkler heads, or irrigation lines within these developed areas unless noted on the plans. The contractor shall solely be responsible for repairing any damage to the property caused by contractor operations.

**2.0 Construction Requirements.** The contractor shall limit their operations to existing public right-of-way and the acquired new right-of-way, permanent easements, and temporary construction easements as specified above. Most of the adjacent parcels along this project are of commercial use. The contractor shall not stage their equipment during non-working hours in either public right of way, permanent easements, or the temporary construction easements. The contractor may elect to work out an agreement that is separate from this contract with individual property owners for storage of material and equipment during construction. The contractor shall comply with Division 100 of the Standard Specifications for storage of material and equipment.

**2.1** The contractor shall see Job Special Provision ***Special Considerations Resulting from Right of Way Negotiations*** for commitments made with property owners during right of way negotiations.

**3.0 Basis of Payment.** No direct payment will be made for compliance to this provision.

W. Access to Commercial Properties

**1.0 Description.** This improvement is in a highly commercial area. While working on and around commercial entrances, the contractor shall make every reasonable effort to minimize any interference to business and to pursue the work diligently. Under no circumstances shall the contractor block ingress/egress to and from businesses during the normal business hours of each business unless approved by the property owner and the engineer.

**1.1** The contractor shall contact each business at least one (1) week in advance to advise them of the work that will take place before working on each business entrance. In some cases where a property has more than one entrance, the property owner may have a preference on whether to have one entrance closed while it is worked on or whether to have the entrances worked on one-half at a time. The contractor is required to do the work according to each individual property owner's preference. The contractor shall not disturb any existing trees, shrubs, landscaping, small block walls or irrigation lines. The contractor shall be solely responsible for repairing any damage to the property caused by contractor operations.

**1.2** The contractor shall see Job Special Provision ***Special Considerations Resulting from Right of Way Negotiations*** for commitments made with property owners during right of way negotiations.

**2.0 Basis of Payment.** No direct payment will be made to the contractor for all costs incurred with compliance of this provision.

X. Special Considerations Resulting from Right of Way Negotiations

**1.0 Description.** As a result of public discussions and/or right-of-way negotiations with the following property owners, the Commission's representative has committed to various items that may impact the construction of this project. The intent of this special provision is to inform the contractor of these commitments so that all parties have the same reasonable expectation for the construction of the project.

**2.0 Construction Requirements.** The contractor shall be required to fulfill the commitments as noted in the following paragraphs:

**Special considerations for project J8S3153**

**2.1 Parcel No. 15:** Contact Kenny Morris at 417-840-0278 AND John Ghirardelli at 417-860-6766 at least 30 calendar days in advance of the need for the Parcel 15 owners to remove the QDOBA sign. Also notify Malissa Reichard at 417-895-7632 and inform her of the need to have others remove and store this sign.

**2.2 Parcel No. 22:** One of the two existing entrances to Sunshine shall remain open at all times during the construction of this project.

**3.0 Basis of Payment.** No direct payment will be made to the contractor to recover the cost of equipment, labor, materials or time required to fulfill the above provisions, unless specified elsewhere in the contract document.

Y. Schedule of Signal, Sidewalk, Driveway, ADA Work, and Paving Operations

**1.0 Description.** This work shall consist of scheduling paving work (J8S0745) after the signal, sidewalk, driveway, and other ADA work is completed.

**2.0 Construction Requirements.** The contractor shall not pave the final lift of any roadway section adjacent to signal, sidewalk, driveway, and other ADA work prior to the signal, sidewalk, driveway, and other ADA work being completed.

**2.1** The contractor will be allowed to do temporary milling/filling as required or as approved by engineer.

**2.2** Before leaving a work area (signal reconstruction, HAWK construction, etc.) to move to another work area, the contractor shall ensure a majority of the work is complete and has been approved by the engineer. The contractor shall install any temporary traffic control, including temporary pavement marking, necessary for the functional operation of these areas.

**3.0 Method of Measurement.** No measurement will be made.

**4.0 Basis of Payment.** No direct payment will be made to comply with this provision. All equipment and labor necessary for the work described will be considered incidental to and completely covered by other pay items provided in the contract.

Z. Pavement Edge Treatment for Drop Off Conditions

**1.0 Description.** This work shall consist of providing pavement edge treatment due to construction methods used by the contractor.

**2.0 Construction Requirements.** The contractor shall perform construction operations so there will be no drop off exceeding 2 inches adjacent to traffic. The contractor shall install pavement edge treatment at locations where the drop off is greater than 2 inches adjacent to traffic.

**3.0 Method of Measurement.** No measurement of pavement edge treatment as described above will be made. Treatment of any drop off greater than 2 inches shall be considered incidental to and completely covered by other pay items provided in the contract.

**4.0 Basis of Payment.** No direct payment will be made to comply with this provision.

AA. Contractor Furnished Surveying and Staking – SW

In addition to the requirements of Section 627 of the Missouri Standard Specifications for Highway Construction, the following shall apply:

**1.0 Description.** The contractor shall be responsible for all layout required on the project. This responsibility shall include, but not be limited to the following: Construction signing, transition milling, pavement marking, loop detectors, etc.

**1.1** The above list is not all inclusive. The contractor shall have the primary responsibility for these operations. The contractor shall provide the Resident Engineer with a staking plan layout for approval prior to the installation of signs. The RE will also provide assistance during this layout provided a request is submitted to the RE or Construction Project Manager 48 hours in advance. This will ensure that all permanently mounted traffic control devices remain consistent with District policy and avoid re-staking. If the contractor installs any signs without engineer approval, all costs associated with re-staking and/or relocation will be at the contractor's expense.

**1.2** The intent of this provision is to increase the quality of our work zones and minimize negative impacts to the contractor's schedule that can result from delays in staking.

**1.3** Any adjustments to the plan quantities or line numbers established in the contract shall be approved by the Engineer.

**2.0 Basis of Payment.** No direct payment will be made to cover the costs associated with these additional requirements. All costs will be considered completely covered by the unit bid price submitted for Contractor Furnished Surveying and Staking.

BB. Type A or Type B Curb and Gutter Construction

**1.0 Description.** This work shall consist of constructing curb and gutter as shown on the plans or as directed by the engineer. This work shall be in accordance with Sec 609 and standard drawing 609.00.

**2.0 Construction Requirements.** The curb and gutter along Route D. was originally constructed as Type A Curb and Gutter but some sections have been reconstructed over the years to include areas of Type B Curb and Gutter. In areas shown for replacement in the plans, the contractor shall match the curb and gutter type of the adjoining sections.

**3.0 Method of Measurement.** Curb and gutter will be measured to the nearest linear foot along the face of the curb.

**4.0 Basis of Payment.** All labor, equipment and materials required to construct Type A or Type B Curb and Gutter as shown on the plans will be considered completely covered by Pay Item No. 609-10.51, Curb and Gutter Type A, per linear foot.



CC. Modified Type S Curb

**1.0 Description.** This work shall consist of constructing curb as shown on the plans or as directed by the engineer. This work shall be in accordance with Sec 609 and standard drawing 609.00 except as modified by the project drawings or by these provisions.

**2.0 Construction Requirements.**

**2.1** Type S Curbs without reinforcement shall be constructed to a maximum height of 12 inches.

**2.2** Modified Type S Curbs constructed with a height exceeding 12 inches but less than or equal to 30 inches shall be constructed and reinforced as shown on the plans. Additional bury depth will be required for heights exceeding 18 inches.

**3.0 Method of Measurement.** Curb will be measured to the nearest linear foot along the face of the curb.

**4.0 Basis of Payment.**

**4.1** The accepted quantities of Modified Type S Curbs with a height exceeding 6 inches but less than or equal to 30 inches will be paid for at the contract unit price for Pay Item No. 609-99.03, Modified Type S Curb, 6 in. to 30 in., linear foot.

**4.2** No direct payment will be made for the following:

- (a) Excavation below the upper surface of the concrete of these items.
- (b) Any work necessary for backfilling the completed items.
- (c) Furnishing or installing reinforcement.

DD. Modified Type A Gutter and Steel Plate

**1.0 Description.** This work shall consist of constructing Modified Type A Gutter with Steel Plates as shown on the plans and in accordance with Section 609 of the Standard Specifications, and specifically as follows.

**2.0 Construction Requirements.** The contractor shall refer to the special sheets detailing the locations with Modified Type A Gutter and Steel Plates. The contractor shall also pay special attention during construction to ensure proper drainage is achieved upon completion of construction.

**2.1** The ½" steel slip-resistant plate shall be installed flush with the top of the Modified Type A Gutter and secured to the top of the angle iron. The steel slip-resistant plate shall have a minimum static coefficient of friction of 0.6 and be ADA compliant since it is installed in the pedestrian access route.

**3.0 Method of Measurement.** Modified Type A Gutter will be measured to the nearest linear foot. Measurement will be made along the flow line of the limits of the Modified Type A Gutter.

The Steel Plates will be measured to the nearest square foot. Measurement will be made along the centers of the top of the plate along the width and length of the plates.

**4.0 Basis of Payment.** All labor, equipment and materials required to construct the Modified Type A Gutter and Steel Plate as designated on the plans and by this specification, complete in place with all incident costs included, shall be included in the unit bid price for the following:

Item No. 604-99.04, Steel Plate, per SF

Item No. 609-99.03, Modified Type A Gutter, per LF

EE. Sprinkler Systems

**1.0** This work includes relocation or replacement of all sprinkler heads and sprinkler system pipes that are impacted by construction activities and installation of improvements.

**2.0** The contractor is advised that various properties along the project locations may have irrigation systems whose sprinkler heads and associated pipe systems are located within or in close proximity to the proposed sidewalk. The contractor shall relocate undamaged sprinkler heads or replace damaged sprinkler heads as directed by the engineer.

**2.1** The contractor shall check with individual businesses to shut off watering as necessary and be aware of the location of said systems. Any damage to the watering system, sprinkler heads, etc. will be repaired or replaced at the contractor's expense and at no direct cost to the Commission.

**2.2** The contractor is strongly advised to drive the project to determine the extent of impact to the existing sprinkler systems located along the route and adjust the bid accordingly.

**3.0 Method of Measurement:** No measurement shall be made.

**4.0 Basis of Payment:** No direct payment will be made for the relocation or replacement of sprinkler systems located along the project limits. All costs associated with this work shall be considered incidental to other pay items provided in the contract.

FF. Modified Paved Approach

**1.0 Description.** This work shall consist of constructing modified paved approaches as shown on the plans in accordance with Sec 608.

**2.0 Construction Requirements.** The modified paved approaches shall be constructed as shown on the plans in accordance with Sec 608.

**3.0 Method of Measurement.** The modified paved approaches will be measured in accordance with Sec 608.

**4.0 Basis of Payment.** All costs incurred for constructing modified paved approaches as shown on the plans, complete in place, will be paid for at the contract unit price for Pay Item 608-50.08, Paved Approach, 8 in, per square yard.

GG. Positive Drainage

**1.0 Description.** The contractor shall be made aware that this project alters the drainage collection and routing throughout the project. Care shall be taken during construction to provide proper drainage.

**2.0 Construction Requirements.** The contractor shall maintain positive drainage for all properties and shall not create locations of ponding or other drainage concerns to property owners. The contractor shall alert the engineer of any potential concerns during construction that may affect the ability to maintain positive drainage.

**3.0 Basis of Payment.** No direct payment will be made for compliance with this provision. All equipment and labor necessary for the work described shall be considered incidental to and completely covered by other pay items provided in the contract.

HH. Sodding and Fertilizing

**1.0 Description.** This work shall consist of installing sod and fertilizer in accordance with Sections 801 and 803 of the Standard Specification.

**2.0 Construction Requirements.** Sod shall be installed at all locations as shown on the plans or where the contractors' operations have disturbed adjacent, existing grass landscapes or as approved by the engineer. Fertilizer shall be applied to all sodded locations per Manufacturers Recommendations. The type of sod and fertilizer shall be as noted below.

| <b><u>Fertilizer</u></b>                |
|-----------------------------------------|
| Starter Fertilizer 12-12-12 or 10-10-10 |

| <b><u>Sod</u></b>     |
|-----------------------|
| Turf Type Tall Fescue |

**3.0 Method of Measurement.** Measurement of sodded areas will be made to the nearest square yard. The area required for fertilizer shall match the final area for sod. Plan quantities were estimated from sidewalk locations with adjacent grassy areas. More or less quantity of said materials may be needed depending upon construction requirements at each location. The Engineer shall verify and approve the contractor's location and quantity of newly sodded areas.

**4.0 Basis of Payment.** All costs incurred by the Contractor by reason of compliance to satisfy the above requirements will be considered incidental to and completely covered in the bid item 803-10.00A, Turf Type Tall Fescue Sodding, measured per square yard.

II. Shared Traffic Control Devices

**1.0 Description.** This work shall consist of sharing specific traffic control devices between projects that are let in combination with this project.

**2.0 Construction Requirements.** The following items will be paid for on project J8S0745 and shall be used by the contractor on projects J8S3133, J8S3153, and J8S0745. The contractor

shall coordinate the use of these traffic control devices for all projects listed above without any additional compensation.

Road Work Next XX Miles Signs  
End Road Work Signs  
Point of Presence Signs  
Rate Our Work Zone Signs  
Work Zone No Phone Zone Signs

**2.1** Road Work Ahead Signs at side streets, project beginning, and project ending will be provided and paid for under project J8S0745. Road Work Ahead Signs shown in other traffic control packages as shown on the plans for the other projects listed will be provided and paid for under those projects.

**3.0 Method of Measurement.** No measurement will be made for sharing traffic control signs between projects.

**4.0 Basis of Payment.** No direct payment will be made to comply with this provision. All equipment and labor necessary for the work described will be considered incidental to and completely covered by other pay items provided in the contract.

JJ. Adjusting MoDOT Pull Boxes

**1.0 Description.** This work shall consist of adjusting existing MoDOT pull boxes (signal, lighting, ITS, etc.) to meet Americans with Disabilities Act (ADA) requirements.

**2.0 Construction Requirements.** The contractor shall adjust existing MoDOT pull boxes at sidewalk and ramp locations as shown on the plans. All work shall be in accordance with Sec 902.

**2.1** The contractor shall exercise reasonable care during the adjustment of the pull boxes. All pull boxes damaged due to contractor negligence shall be replaced at the contractor's expense.

**3.0 Method of Measurement.** Measurement will be made per each for adjusting existing MoDOT pull boxes.

**4.0 Basis of Payment.** All costs incurred for adjusting existing MoDOT pull boxes at the locations shown on the plans, complete in place, will be paid for at the contract unit price for Pay Item 902-99.02, Misc. – Adjust Pull Box, per each.

KK. Cooperation Between Contractors – SW

**1.0 Description.** The contractor shall be aware that other contracts will be administered in the vicinity and timeframe as this contract.

**1.1** Job Numbers J8S3166, J8S3167, J8S3224, J8S3171, J8P3192 and J8P3144 provide for resurfacing, ADA replacement, and safety and operational improvements on Interstate Loop 44 (Chestnut Expressway) from I-44 to Route 65 in Springfield, and various other locations in Greene and Christian Counties. Construction is scheduled for 2024 and 2025.

**1.2** Job Numbers J8P3050C, J8S3190, J8S3149, J8S3162, J8S3169, J8S3172 and J8SU0085 are resurfacing, ADA replacement, and safety and operational projects let in combination on Kearney Street in Springfield MO. Construction is scheduled for 2024 and 2025.

**1.3** Job Numbers J8I3225, JSU0076, J8I3044C, JST0088B and JSU0114 are resurfacing, pavement rebuild and widening, and sound abatement projects let in combination on I-44 in Springfield, MO. Construction is scheduled for 2025-2027.

**2.0 Requirements.** The contractor shall coordinate work so as not to interfere with or hinder the progress or completion of the work being performed by the other contractor. The contractor shall also coordinate work to minimize impacts to the traveling public between the work zones.

**2.1** The contractor will not be granted additional time due to conflicts with other contractors, unless approved by the engineer.

**3.0 Basis of Payment.** No direct payment or additional time 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.

LL. Truck Mounted Attenuator (TMA) for Stationary Activities JSP-23-04

**1.0 Description.** Provide and maintain Truck Mounted Attenuators (TMA) in accordance with Sec 612 and as specified herein.

**2.0 Construction Requirements.** Truck Mounted Attenuators (TMA) shall be used for the work activities indicated in the plans or specified herein.

**2.1 Lane Closures on 4-Lane Highways:**

- (a) Any left, right, or center lane closures for any 4 lane highway affected by this project.

**2.2 Concrete work for Entrances, Ramps and Sidewalk Construction**

- (a) Any lane closure required for any entrance, ramp or sidewalk removal and construction.

**2.3 Traffic Signal Equipment Installation**

- (a) Any lane closure required for any traffic signal equipment removal and installation.

**3.0 Method of Measurement.** No measurement will be made for Truck Mounted Attenuators (TMA).

**4.0 Basis of Payment.** Delete Sec 612.5.1 and substitute with the following:

**612.5.1** No payment will be made for truck mounted attenuators (TMAs) used in mobile operations or for any TMAs designated as optional.

**612.5.1.1** Payment for TMAs required for stationary work activities will be paid for at the contract unit bid price for Item 612-30.01, Truck Mounted Attenuator (TMA), per lump sum. The lump sum payment includes all work activities that require a TMA, regardless of the number of deployments,

relocations, or length of time utilized. No payment will be made for repair or replacement of damaged TMAs.

MM. Miscellaneous Construction Requirements

The Contractor shall be required to provide the following project coordination efforts and miscellaneous project requirements for the successful completion of this project:

- 1) Saw cuts for pavement and sidewalks shall be a minimum of 6 inches.
- 2) The contractor will be required to drill through existing concrete in order to install PSST sign support sleeves/anchors.
- 3) A set number of traffic control devices including ADA compliant barricades has been included in the pay items. No direct pay will be made for additional traffic control devices or ADA compliant barricades due to the contractor's preferred method of construction or preferred schedule of work.
- 4) The contractor shall coordinate the work so that the sidewalk on both sides of the road are not closed at the same time.
- 5) A one (1) inch joint filler shall be placed between all new sidewalk and existing immovable improvements to remain in place such as power poles, fire hydrants, building foundations, pull boxes, manholes, etc.
- 6) Extreme care shall be taken when removing sidewalk adjacent to existing building foundations, concrete slabs, or other improvements to remain in place. This may require additional saw cutting, hand work, time, equipment, materials etc. to not damage existing improvements. The engineer shall approve the contractor's proposed method to remove sidewalk adjacent to existing improvements. All improvements damaged due to the contractor's activities will be completely repaired in kind at the contractor's expense and as approved by the engineer.
- 7) No direct pay will be made for any clearing or grubbing required to construct this project.
- 8) The Contractor shall trim bushes and trees that overhang the new sidewalk at least 1 foot beyond the sidewalk edge, and at least 8 feet above the top of the existing or new sidewalk.
- 9) All pavement markings on Route D will be provided by other projects.
- 10) A Modified S Curb shall be constructed at locations shown on the plans. Details for this Modified S Curb are provided in the plans. This curb shall vary in height as required to support the final proposed grade lines between sidewalk and proposed slopes. This materials for this Modified S Curb shall meet all specifications of Section 609 unless otherwise specified in the plans. Payment for constructing this curb shall be per item 609-99.03, Modified Type S Curb, per linear foot.
- 11) City of Springfield sanitary sewer manholes shall be adjusted to grade at locations indicated on the plans. The City shall be notified of these adjustments 14 calendar days

prior to constructing the adjustments. The contractor shall adjust these manholes lids as directed by the City, using City standards where applicable, and adjustments will be subject to City force inspections. Payment for adjusting these manholes shall be per item 604-99.02, City Sanitary Manhole Adjust to Grade. Per each.

- 12) No direct pay will be made for removing existing signs from existing posts and installing the existing signs onto new sign supports at locations shown on the plans. Signs damaged due to contractor activities will be repaired or replaced in kind as approved by the Engineer.
- 13) New overhead signal heads shall be provided at the Oak Grove and Ventura intersections on existing mast arms and signal posts. The old heads shall be removed and transported to MoDOT facilities as noted in other job special provisions. New brackets and other miscellaneous equipment will be provided for each new signal head as noted on the plans.
- 14) All wires to be abandoned or removed as noted on the signal plans shall be removed from the controller to the signal device. This shall include all loop detector wires serving loops that will be removed.
- 15) At the Ventura signal, due to rerouting of conduits, all wires shall be relocated from the controller to pull boxes 3 and 4 as needed, and relocated to new or existing conduits back to the controller. Any wires damaged due to the contractors activities shall be repaired or replaced as directed by the engineer.
- 16) Payment for compliance with the above requirements will be considered completely covered by the items provided for in the contract.

NN. Special Provisions for Protection of BNSF Railway Company Interests

To Report an Emergency on the railroad call: (800) 832-5452  
Greene Co. Rte. D/Sunshine St., US DOT# 664251D MP 243.32 BNSF Cuba Subdivision, Kissick Branch in Springfield, MO. **Current FRA data shows 0 daytime trains and 0 nighttime trains and 0 passenger trains**

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

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

**1.2** The authorized representative of the Missouri Highways and Transportation Commission, herein called "Engineer", shall have authority over all other matters as prescribed herein and in the project specifications.

**2.0 Contractor's indemnity Obligations to the Railroad.**

**2.1** The term "contractor" as used in this special provision includes any and all subcontractors. The contractor shall indemnify, defend and hold harmless the Railroad from and against any and all loss, damage, claims, demands, causes of action, costs and expenses of whatsoever nature arising out of injury to or death of persons whomsoever, or out of damage to

or destruction of property whatsoever, including, without limitation, damage to fiber optic, communication and other cable lines and systems, where such injury, death, damage or destruction results from any cause arising out of work performed by the contractor pursuant to the agreement between Railroad and the Commission for the project, and shall also release the Railroad from and shall waive any claims for injury or damage to equipment or other property, which may result from the construction, maintenance and operation of railroad tracks, wire lines, fiber optic cable, pipe lines and other facilities on said right of way of the Railroad by the contractor. **THE LIABILITY ASSUMED BY THE CONTRACTOR WILL NOT BE AFFECTED BY THE FACT, IF IT IS A FACT, THAT THE DAMAGE, DESTRUCTION, INJURY, DEATH, CAUSE OF ACTION OR CLAIM WAS OCCASIONED BY OR CONTRIBUTED TO BY THE NEGLIGENCE OF THE RAILROAD, THE RAILROAD'S AGENTS, SERVANTS, EMPLOYEES OR OTHERWISE, EXCEPT TO THE EXTENT THAT SUCH CLAIMS ARE PROVEN BY ANY CLAIMANT TO HAVE BEEN PROXIMATELY CAUSED BY THE INTENTIONAL MISCONDUCT OR SOLE OR GROSS NEGLIGENCE OF THE RAILROAD.** The contractor's indemnity shall include loss of profits or revenue arising from damage or destruction to fiber optic, communication and other cable lines and systems.

**2.2** In addition to the indemnity obligations contained in the preceding paragraph, the contractor shall indemnify, defend and hold harmless the Railroad from any claims, expenses, costs, actions, demands, losses, fines, penalties, and fees, of whatsoever nature arising from, related to or connected, in whole or in part, with the following:

- (a) The removal of the contractor's agents, servants, employees or invitees from the Railroad's property for safety reasons.
- (b) Contractor's compliance or failure to comply with the provision of applicable law in connection with the performance of contractor's work.

### **3.0 Notice of Starting Work.**

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

- (a) The contractor shall be required to apply for, execute and comply with all provisions of a permit obtained by accessing the following link: <http://bnsf.railpermitting.com>

**3.2** The Railroad's written authorization to proceed with the work, with a copy to the Engineer, will include the names, addresses and telephone numbers of the Railroad's representatives who are to be notified as hereinafter required. Where more than one representative is designated, the area of responsibility of each representative shall be specified.

### **4.0 Interference with Railroad Operations.**

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



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

**4.3** Should conditions arising from, or in connection with the work require that immediate and unusual provisions be made to protect the Railroad's operations and property, the contractor shall make such provisions. If in the judgment of the Railroad Engineer, or the Engineer if the Railroad Engineer is absent, such provision is insufficient, the Railroad Engineer or Engineer may require or provide such provisions as deem necessary. In any event, such provisions shall be at the contractor's expense and without cost to the Railroad or the Commission.

**4.4** The contractor shall be responsible for any damage to the Railroad as a result of work on the project, which shall include but not be limited to interference with the normal movement of trains caused exclusively by the work performed by the contractor. The contractor shall be responsible for damages for the Railroad's train delays that are caused exclusively by the contractor. The Railroad agrees not to perform any act to unnecessarily cause any train delay. The damages for train delays per freight hour will be billed at an average rate per hour as determined from the Railroad's records. These records shall be provided by the Railroad, upon request, to the Commission or the Commission's contractor.

## **5.0 Track Clearances.**

**5.1** The minimum track clearances to be maintained by the contractor during construction are shown on the project plans. However, before undertaking any work within Railroad's right of way, or before placing any obstruction over any track, the contractor shall:

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

**5.2** The contractor shall fully comply with any horizontal and vertical clearance requirements imposed by Missouri state statutes and regulations and Federal statutes and regulations regarding the placement of structures or equipment near or over railroad tracks.

## **6.0 Construction Procedures.**

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

- (a) Subject to the inspection and review of the Railroad.
- (b) In accordance with the Railroad's written outline of specific conditions.
- (c) In accordance with this special provision.

**(d) Care shall be taken to avoid damage to concrete crossing panels. Milling within two (2) feet of concrete crossing planks shall be done manually or using specific machinery for fine mill work such as a milling attachment on a skid-steer or other means and methods approved by the engineer.**

**6.2 Excavation.** The subgrade of an operated track shall be maintained with the berm edge at least 12 feet from centerline of track and not more than 26 inches below top of the rail. The contractor will not be required to make existing section meet this specification if substandard, in which case the existing section will be maintained. The contractor shall cease all work and notify the Railroad immediately before continuing excavation in the work area if obstructions are encountered which do not appear on the drawings. If the obstruction is a utility and the owner of the utility can be identified, then the contractor shall also notify the owner immediately. If there is any doubt about the location of underground cables or lines of any kind, no work shall be performed until the exact location has been determined. There will be no exceptions to these instructions. Additionally, all excavations shall be conducted in compliance with applicable Occupational Safety and Health Act regulations and, regardless of depth, shall be shored where there is any danger to tracks, structures or personnel. Any excavations, holes or trenches on the Railroad's property shall be covered, guarded and/or protected when not being worked on. When leaving work site areas at night and over weekends, the areas shall be secured and left in a condition that will ensure that Railroad's employees and other personnel who may be working or passing through the area are protected from all hazards. All excavations shall be back filled as soon as possible.

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

**6.4 Demolition of Existing Structures.** The contractor shall be required to take special precaution and care in connection with demolition of existing structures. The procedure for doing such work, including need of and plans for temporary falsework, shall first be approved by Railroad Engineer before work is performed, but such approval shall not relieve the contractor from liability. Before submission of plans to the Railroad Engineer for approval, the Engineer will first review such plans.

**6.5 Falsework.** The contractor shall be required to take special precaution and care to prevent any material from falling on the Railroad's right of way. The procedure for preventing material from falling, including need of and plans for temporary falsework, shall first be approved by the Railroad Engineer, but such approval shall not relieve the contractor from liability. Before

submission of plans to the Railroad Engineer for approval, the Engineer will first review such plans.

## **6.6 Blasting.**

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

- (a) Blasting shall be done with light charges under the direct supervision of a responsible officer or employee of the contractor.
- (b) Electric detonating fuses shall not be used because of the possibility of premature explosions resulting from operation of two-way train radios.
- (c) No blasting shall be done without the presence of the Railroad Engineer. At least 72 hours advance notice to the person designated in the Railroad's notice of authorization to proceed as mentioned in Section 2.2 of this job special provision, the contractor shall be required to arrange for the presence of the Railroad Engineer and such flagging as the Railroad may require.
- (d) The contractor shall have at the job site adequate equipment, labor and materials and allow sufficient time to clean up debris resulting from the blasting without delay to trains, as well as correcting, at contractor's expense, any track misalignment or other damage to the Railroad's property resulting from the blasting as directed by the Railroad Engineer. If contractor's actions result in delay of trains, the contractor shall bear the entire cost thereof.

**6.6.2** The Railroad Engineer will:

- (a) Determine the approximate location of trains and advise the contractor the approximate amount of time available for the blasting operation and clean-up.
- (b) Have the authority to order discontinuance of blasting if blasting is too hazardous or is not in accordance with this special provision.

**6.7 Maintenance of Railroad Facilities.** The contractor shall be required to maintain all ditches and drainage structures free of silt or other obstructions which may result from contractor's operations. The contractor shall promptly repair eroded areas within Railroad's right of way and repair any other damage to the Railroad's property, tenants, licensees, easement grantees and invitees. All such maintenance and repair of damages due to the contractor's operations shall be done at the contractor's expense.

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

**6.8.1** The contractor shall not store or stockpile construction materials or equipment closer than 25 feet to the centerline of the nearest railroad track or on the Railroad's property not covered by construction easement, contractor's permit, lease or agreement. Additionally, the contractor shall not store or leave materials or equipment within 250 feet of the edge of any highway/rail at-grade crossings. Further, both sides of a main track shall remain unobstructed for a distance of 10 feet from the exterior edge of the track at all times to allow for stopped train inspection.

**6.8.2** Machines or vehicles shall not be left unattended with the engine running. Parked machines or equipment shall be in gear with brakes set and with blade, pan or bucket lowered to the ground if so equipped. All grading or construction machinery that is left parked near the track unattended shall be effectively immobilized so that unauthorized persons cannot move such equipment.

**6.9 Cleanup.** Upon completion of the work, the contractor shall remove from within the limits of the Railroad's right of way, all machinery, equipment, surplus materials, falsework, rubbish or temporary buildings of the contractor, and leave said right of way in a neat condition satisfactory to the Railroad Engineer.

#### **6.10 Buried Cable and Other Buried Facilities.**

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

**6.10.2** Failure to mark or identify the buried Lines, pipelines or utility facilities will be sufficient cause for the Railroad Engineer to stop construction at no cost to the Commission or Railroad until these items are completed. The contractor shall be responsible for the rearrangement of any buried facilities, Lines, pipelines or utility facilities determined to interfere with the construction. The contractor shall cooperate fully with any telecommunications companies, pipeline operators and utility facility owners in performing such rearrangements.

**7.0 Damages.** The Railroad will not assume liability for any damages to the contractor, contractor's work, employees, servants, equipment and materials caused by railroad traffic. Any cost incurred by the Railroad for repairing damages to Railroad's property or to property of the Railroad's tenants, licensees, easement grantees and invitees caused by or resulting from the contractor's operations shall be paid directly to the Railroad by contractor.

#### **8.0 Flagging Services.**

**8.1 When Required.** Under the terms of the agreement between the Commission and the Railroad, the Railroad has sole authority to determine the need for flagging required to protect the Railroad's operations. In general, the requirements of such services will be whenever the contractor's personnel or equipment are, or are likely to be, working on the Railroad's right of way within 25 feet of the centerline of any track, or across, over, adjacent to, or under a track, or when such work has disturbed or is likely to disturb a railroad structure or the railroad roadbed or surface and alignment of any track to such extent that the movement of trains must be controlled by flagging, or reasonable probability of accidental hazard to Railroad's operations or

personnel. Normally, the Railroad will require one flagger per project; but in some cases, more than one may be necessary, such as yard limits where 3 flaggers may be required. However, if the contractor works within distances that violate instructions given by the Railroad Engineer or performs work that has not been scheduled with the Railroad Engineer, flaggers may be required full time until the project has been completed.

## **8.2 Scheduling and Notification.**

**8.2.1** Not later than the time that approval is initially requested to begin work on the Railroad's right of way (30 days), contractor shall furnish to the Railroad and the Commission a schedule for all work required to complete the portion of the project within Railroad's right of way and arrange for a job site meeting between the contractor, the Engineer, and the Railroad Engineer. Flaggers may not be scheduled until the job site meeting has been conducted and the contractor's work scheduled.

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

Mr. Nathaniel Norris  
BNSF Railroad  
636-288-0534  
[Nathaniel.norris@bnsf.com](mailto:Nathaniel.norris@bnsf.com)

And

[BNSFScheduling@wilsonco.com](mailto:BNSFScheduling@wilsonco.com)

**8.2.3** If, after the flagger is assigned to the project site, emergencies arise which require the flagger's presence elsewhere, then the contractor shall delay work on the Railroad's right of way until such time as the flagger is again available. Any additional costs resulting from such delay shall be borne by the contractor and not the Railroad.

## **8.3 Payment.**

**8.3.1** The Contractor will pay the Railroad or appropriate flagging contractor directly for the cost of flagging services associated with the project and notify the MoDOT Resident Engineer of such payments.

**8.3.2** The Contractor shall be responsible for arranging needed flagging services as required by the Railroad to accomplish the highway improvement.

**8.3.3** The cost of flagging service is estimated at approximately \$1,600 per day based on an 8-hour work day and a 40-hour work week. This cost includes the base pay for the flagger, overhead, and per diem charge for travel expenses, meals and lodging.

If flagging is provided by an approved Third-Party Flagging Company, rates and billing will be governed by the agreement set up between the Contractor and the Third-Party Flagging Company at the time the services are provided. It is the responsibility of the Contractor to ensure that billing complies with applicable provisions of Volume 1, Chapter 4, §3 and Volume 6, Chapter 6 §2, Subsection 1 of the Federal-Aid Highway Program Manual issued by the Federal Highway Administration, including all current amendments.

If flagging is provided by the Railroad, the charge to the contractor by the Railroad will be the actual cost based on the rate of pay for the Railroad's employees who are available for flagging service at the time the service is required. Work by a flagger in excess of 8 hours per day or 40 hours per week but not more than 12 hours a day will result in overtime pay at 1 1/2 times the appropriate rate. Work by a flagger in excess of 12 hours per day will result in overtime pay at 2 times the appropriate rate. If work is performed on a holiday, the flagging rate is 2 1/2 times the normal rate. Railroad expenses incurred preparing and handling invoices will also be charged to the contractor and/or the Commission. Charges to the contractor and/or the Commission by the Railroad shall be in accordance with applicable provisions of Volume 1, Chapter 4, §3 and Volume 6, Chapter 6, §2, Subsection 1 of the Federal-Aid Highway Program Manual issued by the Federal Highway Administration, including all current amendments. Flagging costs are subject to change. The above estimates of flagging cost are provided for information only and are not binding in any way. Each time a flagger is called, the minimum period for billing will be the 8 hour basic day unless the flagger can be assigned to other Railroad work during the work day.

**8.3.4** In addition to the hours of providing flagging at the construction site, the flagger hours will include, but is not limited to, travel time to and from the project, time to complete paperwork for the flagging operations and time for setting warning signs/flags for the train traffic.

#### **8.4 Verification.**

**8.4.1** Any complaints concerning a flagger shall be resolved in a timely manner. If need for a flagger is questioned, please contact the Railroad Engineer and Mr. Jacob D Rzewnicki, Manager of Public Projects at 913-551-4275. All verbal complaints shall be confirmed in writing by the contractor within 5 working days with copy to the Railroad Engineer and Engineer. All written correspondence shall be addressed to the BNSF Manager of Public Projects.

**8.4.2** The Railroad flagger assigned to the project will be responsible for notifying the Engineer upon arrival at the job site on the first day, or as soon thereafter as possible, that flagging services begin and on the last day that flagger performs such services for each separate period that services are provided. The Engineer will document such notification in the project records.

#### **9.0 Haul Across Railroads.**

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

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

**10.0 Work for the Benefit of the Contractor.** All temporary or permanent changes in wire lines or other facilities which are considered necessary to the project are shown on the plans, and are included in the agreement between the Commission and the Railroad or will be covered by appropriate revisions to same which will be initiated and approved by the Commission and/or the Railroad. Should the contractor desire any changes in addition to the above, then contractor shall make separate arrangements with the Railroad for same to be accomplished at the contractor's expense.

**11.0 Cooperation and Delays.** The contractor shall arrange a schedule with the Railroad for accomplishing staged construction involving work by the Railroad or tenants, licensees, easement grantees and invitees of the Railroad. In arranging a schedule, the contractor shall ascertain, from the Railroad, the lead time required for assembling crews, materials and make due allowance. No charge of claims of the contractor against the Railroad will be allowed for hindrance or delay on account of railway traffic for any work done by the Railroad, other delay incident to or necessary for safe maintenance of railway traffic, or for any delays due to compliance with this special provision.

**12.0 Trainman's Walkways.** Along the outer side of each exterior track of multiple operated track and on each side of single operated track, an unobstructed continuous space suitable for trainman's use in walking along trains shall be maintained extending to a line not less than 12 feet from centerline of track. Any temporary impediments to walkways and track drainage encroachments or obstructions allowed during work hours while Railway's protective service is provided shall be removed before the close of each workday. Any excavation near the walkway, the contractor shall install a handrail with a 12 feet minimum clearance from centerline of track.

**13.0 Insurance.** The amount of work to be performed upon, over or under Railroad's right of way is estimated to be 1 percent of the contractor's total bid for the project.

**13.1** In addition to any other forms of insurance or bonds required under the terms of the contract and specifications, Contractor must, at its sole cost and expense, procure and maintain during the life of this Agreement the following insurance coverage:

- (a) Commercial General Liability insurance. This insurance shall contain broad form contractual liability with a combined single limit of a minimum of \$2,000,000 each occurrence and an aggregate limit of at least \$6,000,000 but in no event less than the amount otherwise carried by the contractor. Coverage must be purchased on a post

2004 ISO occurrence form or equivalent and include coverage for, but not limit to the following:

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

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

- The definition of insured contract must be amended to remove any exclusion or other limitation for any work being done within 50 feet of railroad property.
- Waiver of subrogation in favor of and acceptable to Railway.
- Additional insured endorsement in favor of and acceptable to Railway.
- Separation of insureds.
- The policy shall be primary and non-contributing with respect to any insurance carried by Railway.

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

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

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

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

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

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

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

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



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

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

- Waiver of subrogation in favor of and acceptable to Railway.
- (d) Railroad Protective Liability insurance naming only the Railway as the Insured with coverage of at least \$2,000,000 per occurrence and \$6,000,000 in the aggregate. The policy Must be issued on a standard ISO form CG 00 35 10 93 and include the following:
- Endorsed to include the Pollution Exclusion Amendment (ISO form CG 28 31 10 93)
  - Endorsed to include the Limited Seepage and Pollution Endorsement.
  - Endorsed to remove any exclusion for punitive damages.
  - No other endorsements restricting coverage may be added.
  - The original policy must be provided to the Railway prior to performing any work or services under this Agreement

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

### **13.2 Other Requirements:**

**13.2.1** All policies (applying to coverage listed above) must not contain an exclusion for punitive damages and certificates of insurance must reflect that no exclusion exists.

**13.2.2** Contractor agrees to waive its right of recovery against Railway for all claims and suits against Railway. In addition, its insurers, through the terms of the policy or policy endorsement, waive their right of subrogation against Railway for all claims and suits. The certificate of insurance must reflect the waiver of subrogation endorsement. Contractor further waives its right of recovery, and its insurers also waive their right of subrogation against Railway for loss of its owned or leased property or property under contractor's care, custody or control.

**13.2.3** Contractor is not allowed to self-insure without the prior written consent of Railway. If granted by Railway, any deductible, self-insured retention or other financial responsibility for claims must be covered directly by contractor in lieu of insurance. Any and all Railway liabilities that would otherwise, in accordance with the provisions of this Agreement, be covered by contractor's insurance will be covered as if contractor elected not to include a deductible, self-insured retention or other financial responsibility for claims.

**13.2.4** Prior to commencing the Work, contractor must furnish to Railway an acceptable certificate(s) of insurance including an original signature of the authorized representative evidencing the required coverage, endorsements, and amendments and referencing the contract audit/folder number if available. Contractor shall notify Railway in writing at least 30 days prior to any cancellation, non-renewal, substitution or material alteration. Upon request from Railway, a certified duplicate original of any required policy must be furnished. Contractor should send the certificate(s) to the following address:

Job No.: J8S3153  
Route: D  
County: Greene

Railroad:  
BNSF Railway Company  
P.O. Box 140528  
Kansas City, MO 64114  
Toll Free: 877-576-2378  
Fax number: 817-840-7487  
Email: [BNSF@certfocus.com](mailto:BNSF@certfocus.com)  
[www.certfocus.com](http://www.certfocus.com)

Commission:  
Ms. Brandi Baldwin  
State Construction and Materials Engineer  
MoDOT  
P.O. Box 270  
Jefferson City, MO 65102

**13.2.5** Any insurance policy must be written by a reputable insurance company acceptable to Railway or with a current Best's Guide Rating of A- and Class VII or better, and authorized to do business in the state(s) in which the service is to be provide.

**13.2.6** Contractor represents that this Agreement has been thoroughly reviewed by contractor's insurance agent(s)/broker(s), who have been instructed by contractor to procure the insurance coverage required by this Agreement. Allocated Loss Expense must be in addition to all policy limits for coverages referenced above. Not more frequently than once every five years, Railway may reasonably modify the required insurance coverage to reflect then-current risk management practices in the railroad industry and underwriting practices in the insurance industry.

**13.2.7** If any portion of the operation is to be subcontracted by contractor, contractor must require that the subcontractor provide and maintain the insurance coverages set forth herein, naming Railway as an additional insured, and requiring that the subcontractor release, defend and indemnify Railway to the same extent and under the same terms and conditions as contractor is required to release, defend and indemnify Railway herein.

**13.2.8** Failure to provide evidence as required by this section will entitle, but not require, Railway to terminate this Agreement immediately. Acceptance of a certificate that does not comply with this section will not operate as a waiver of contractor's obligations hereunder.

**13.2.9** The fact that insurance (including, without limitation, self-insurance) is obtained by contractor will not be deemed to release or diminish the liability of contractor including, without limitation, liability under the indemnity provisions of this Agreement. Damages recoverable by Railway will not be limited by the amount of the required insurance coverage.

**13.2.10** For purposes of this section, Railway means "Burlington Northern Santa Fe LLC", "BNSF RAILWAY COMPANY" and the subsidiaries, successors, assigns and affiliates of each.

**13.2.11** Railroad will not accept binders as evidence of insurance, the original policy shall be provided. The named insured, description of the work and designation of the job site to be shown on the Policy are as follows:

- (a) Named Insured: BNSF Railway Company
- (b) Description and Designation:
  - ADA improvements.
  - Greene County Rte. D/Sunshine St.
  - Job No. J8S3153
  - US DOT# 664251D MP 243.32 BNSF Cuba Sub,
  - Kissick Branch in Springfield, MO.

**13.2.12** The contractor must notify BNSF Manager of Public Projects at [jacob.rzewnicki@bnsf.com](mailto:jacob.rzewnicki@bnsf.com) when applying for railroad insurance coverage.

**13.3** If any part of the work is sublet, similar insurance and evidence thereof in the same amounts as required of the prime contractor, shall be provided by or in behalf of the subcontractor to cover the subcontractor's operations. Endorsements to the prime contractor's policies specifically naming subcontractors and describing their operations will be acceptable for this purpose.

**13.4** All Insurance hereinbefore specified shall be carried until all work required to be performed under the terms of the contract has been satisfactorily completed within the limits of the Railroad's right of way as evidenced by the formal acceptance by the Commission. Insuring Companies may cancel insurance by permission of the Commission and Railroad or on 30 days written notice to the Railroad and Commission.

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

- (a) Notify the Railroad's Resource Operations Center at (800) 832-5452, of such discovery.
- (b) Take safeguards necessary to protect employees, subcontractors, agents and/or third parties.
- (c) Exercise due care with respect to the release, including the taking of any appropriate measure to minimize the impact of such release

**15.0 Personal Injury Reporting.** The Railroad is required to report certain injuries as a part of compliance with Federal Railroad Administration ("FRA") reporting requirements. Any personal injury sustained by any employee of the contractor, subcontractor or contractor's invitees while on the Railroad's property shall be reported immediately, by phone or mail if unable to contact in person, to the Railroad's representative in charge of the project. The Non-Employee Personal Injury Data Collection Form is to be completed and sent by Fax to the Railroad at (817) 352-7595 and to the Railroad's Project Representative no later than the close of shift on the date of the injury.

**16.0 Failure to Comply.** In the event the contractor violates or fails to comply with any of the requirements of this special provision, the below orders will be applied. Any such orders shall

remain in effect until the contractor has remedied the situation to the satisfaction of the Railroad Engineer and the Engineer.

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

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

**17.0 Payment for Cost of Compliance.** No separate payment will be made for any extra cost incurred on account of compliance with this special provision. All such cost shall be included in the contract unit price for other items included in the contract. Railroad will not be responsible for paying the contractor for any work performed under this special provision.

OO. Notice to Bidders of Funding by Third Party JSP-18-02A

**1.0** Bidders are advised that the City of Springfield, Missouri is required to provide substantial funds for construction of Job No. J8S3153.

**2.0** Bidders acknowledge that their bids are made with knowledge of and subject to the condition the City of Springfield, Missouri providing substantial funds prior to authorization of any award of a contract for this job by the Commission.

**3.0** Bidders agree that they shall be estopped, both in law and equity, to assert any right to award of a contract for this job by the Commission should the City of Springfield, Missouri not provide substantial funds for any reason.

PP. Flashing Yellow Arrow Implementation Details

**1.0 Description.** This project includes the implementation of flashing yellow arrow signals.

**2.0 Construction Requirements.** The contractor shall follow the guidance below when implementing the Flashing Yellow Arrow.

**2.1** Output file assignments for FYA compact mode in the 332 signal control cabinet are depicted below.

| Type 170 Output File Assignments for Flashing Yellow Left Turn Applications |           |           |            |           |            |             |
|-----------------------------------------------------------------------------|-----------|-----------|------------|-----------|------------|-------------|
|                                                                             | SW 1/PH 1 | SW 2/PH 2 | SW 3/2 PED | SW 4/PH 3 | SW 5/PH 4  | SW 6/4 PED  |
| FTR1                                                                        | RL        | R         | 2 DW       | RL        | R          | 4 DW        |
| FTR2                                                                        | YL        | Y         | PH 1 L     | YL        | Y          | PH 3 L      |
|                                                                             | FYL       | G         | 2 W        | FYL       | G          | 4 W         |
|                                                                             | SW 7/PH 5 | SW 8/PH 6 | SW 9/6 PED | SW 10/PH7 | SW 11/PH 8 | SW 12/8 PED |
| FTR3                                                                        | RL        | R         | 6 DW       | RL        | R          | 8 DW        |
| FTR4                                                                        | YL        | Y         | PH 5 L     | YL        | Y          | PH 7 L      |
|                                                                             | FYL       | G         | 6 W        | FYL       | G          | 8 W         |

Monitor

**2.2** Any and all required cabinet modules or components to make the Flashing Yellow Arrow function properly will be supplied and installed by the Contractor. This includes, but is not limited to load switches, detector cards and loading resistors.

**2.3** The following person shall be contacted to obtain the required controller timing and data changes at least one week in advance of the desired implementation:

Brittany Mitchell  
Intermediate Traffic Studies Specialist  
Phone 417-895-7395  
Cell Phone 417-340-6468  
Email: [Brittany.Mitchell@modot.mo.gov](mailto:Brittany.Mitchell@modot.mo.gov)

**2.4** Unused load switch outputs may need to be wired to a loading resistor to satisfy conflict monitor voltage requirements. A 1500 ohm, 25W resistor shall be used.

**2.5** Red “flash color” cabinet programming plugs shall be installed for all new or modified left turn phases.

**2.6** The contractor shall follow the appropriate conflict monitor unit manual to properly configure and implement the flashing yellow arrow and ensure the traffic signals/phases are safely monitored. Conflict monitors on this project shall be Eberle Design, Inc( EDI), Model 2010ECLip. Website for EDI: <https://www.editraffic.com/about-us>

**3.0 Basis of Payment.** No direct payment will be made to the contractor to recover the cost of fulfilling these requirements, except for the items included in the contract as a pay item.

QQ. No Value Engineering Proposals for 2.5 Inch Perforated Square Steel Tube (PSST) Posts and Concrete Post Anchors for 2.5 Inch Perforated Square Steel Tube (PSST) Posts

This project will require 2.5 In. Perforated Square Steel Tube (PSST) Posts and Concrete Post Anchors for 2.5 In. Perforated Square Steel Tube (PSST) Posts as specified in the plans. No Contractor initiated Value Engineering Change Proposals (VECPs) or Practical Design Value

Engineering Change Proposals (PDVECPs) will be accepted for any part of installing existing signs or new signs on new Perforated Square Steel Tube (PSST) Posts and Concrete Post Anchors different than the 2.5 Inch Perforated Square Steel Tube (PSST) Posts and Concrete Post Anchor for 2.5 Inch Perforated Square Steel Tube (PSST) Posts that is required.

RR. Retroreflective Backplates

**1.0 Description.** This work shall consist of furnishing and installing traffic signal retroreflective backplates as noted on the plans and conforming to the following standards.

**2.0 System Requirements.** Signal retroreflective backplates shall meet the minimum requirements in Sec 1092. Retroreflective tape shall not be used as a substitute for retroreflective backplates.

**3.0 Construction Requirements.** Construction requirements shall conform to Sec 902.

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

**5.0 Payment.** Accepted traffic signal retroreflective backplates will be paid at the contract unit price per each, regardless of the number of lenses per signal head. Payment will be considered full compensation for all labor, equipment, material and incidentals to complete the described work.

| Item No.  | Type | Description                |
|-----------|------|----------------------------|
| 902-99.02 | Each | Retroreflective Backplates |

SS. Work Zone Segment Commitment

**1.0 Description.** As a result of discussions with business owners, the Commission's representative has committed to various items that may impact the construction of this project. The intent of this special provision is to inform the contractor of these commitments so that all parties have the same reasonable expectation for the construction of this project.

**2.0 Construction Requirements.** The contractor shall not perform work between Eastgate Avenue/S Bedford Avenue and Blackman Road until January 4, 2027. In addition, the contractor shall not perform work between Eastgate Avenue/S Bedford Avenue and Blackman Road between November 1, 2027 and January 1, 2028. Full ingress/egress to all businesses shall be maintained during these timeframes, unless approved by the property owner and the engineer.

**3.0 Basis of Payment.** No direct payment will be made to the contractor to recover the cost of equipment, labor, materials or time required to fulfill the above provision, unless specified elsewhere in the contract document.

TT. Early Notice to Proceed

**1.0 Description.** The contractor will be given a Notice to Proceed Date for this project, as stipulated in JSP B – Contract Liquidated Damages. All contracts shall be executed and returned

Job No.: J8S3153  
Route: D  
County: Greene

to the Commission by or before the end of the day on the business day prior, in order to commence work on the Notice to Proceed date.

**2.0** The contract will be distributed electronically by the Commission for execution through DocuSign® upon award.

**3.0** As part of the contract execution process, the contractor shall complete and deliver the original documents/forms listed below, immediately following award of the contract.

Contract Bond Form (with associated Power of Attorney Form)  
Contractor Acknowledgement Form  
Workers Eligibility Verification Affidavit

**4.0** These documents will be provided to the contractor through Bid Express®/BidX® correspondence immediately following Commission award. A checklist with instructions on how to complete these documents will be provided with said award correspondence. In order to expedite contract execution, contractors are encouraged to follow the instructions on the checklist. Inquiries related to completing the listed documents may be directed to the following:

Rodney Braman  
Phone: (573) 751-9253  
Email: [Rodney.Braman@modot.mo.gov](mailto:Rodney.Braman@modot.mo.gov)

**5.0** Potential Bidders without a current MoDOT issued DocuSign® access code shall notify Ryan Martin prior to the bid to determine the necessary steps to establish a Contractor specific access code. If another MoDOT District Office location other than the one listed below is more convenient, please contact Ryan Martin.

CENTRAL OFFICE  
Ryan Martin  
Bidding and Contract Services Engineer  
105 West Capitol  
Jefferson City, MO 65102-0270  
Phone: (573) 526-2923  
Email: [Ryan.Martin@modot.mo.gov](mailto:Ryan.Martin@modot.mo.gov)

UU. Liquidated Savings Specified

**1.0 Description.** If construction of proposed improvements as shown in the contract and plans for J8S0745, J8S3133, and J8S3153 on Route D, is not completed by December 31, 2027, 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 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 all proposed improvements as shown in the contract and plans for J8S0745, J8S3133 and J8S3153. To qualify for this incentive payment, all work as directed in the contract and on the plans shall be completed, including striping and open to traffic. An

Job No.: J8S3153  
Route: D  
County: Greene

incentive payment of \$200,000 will be paid if the work described above is completed by December 31, 2027. The maximum amount paid as liquidated savings will not exceed \$200,000.

**2.1** 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.

**2.2** 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.