

JOB SPECIAL PROVISIONS TABLE OF CONTENTS (ROADWAY)

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

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 <p>THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.</p>	<b>MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION</b> 105 W. CAPITOL AVE. JEFFERSON CITY, MO 65102 Phone 1-888-275-6636
	<b>Civil Design, Inc.</b> 5220 Oakland Ave. St. Louis, MO 63110 Certificate of Authority: 2002006804 Consultant Phone: 314-863-5570
	If a seal is present on this sheet, JSP's have been electronically sealed and dated.
	JOB NUMBER: J6I3413-J6I3500 ST. LOUIS COUNTY, MO DATE PREPARED: 10/14/21
	ADDENDUM DATE:
Only the following items of the Job Special Provisions (Roadway) are authenticated by this seal: All	

JOB  
SPECIAL PROVISION

A. General - Federal JSP-09-02G

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

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

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

General Provisions & Supplemental Specifications

Supplemental Plans to July 2021 Missouri Standard Plans  
For Highway Construction

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

B. Contract Liquidated Damages

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

**2.0 Period of Performance.** Prosecution of work is expected to begin on the date specified below in accordance with Sec 108.2. Regardless of when the work is begun on this contract, all work shall be completed on or before the date specified below. Completion by this date shall be in accordance with the requirements of Sec 108.7.1.

Early Notice to Proceed:  
Completion Date:

January 3, 2022  
December 15, 2023

**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
J6I3413	N/A	\$9,800
J6I3500	N/A	\$9,800

**3.0 Liquidated Damages for Contract Administrative Costs.** Should the contractor fail to complete the work on or before the completion date specified in Section 2.0, or within the number of calendar days specified in Section 2.1, whichever occurs first, the contractor will be charged contract administrative liquidated damages in accordance with Sec 108.8 in the amount of **\$3,000** 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 above specified completion date or calendar days.

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

C. Work Zone Traffic Management

**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 **15 minutes** to prevent congestion from escalating beyond this delay threshold. If disruption of the traffic flow occurs and traffic is backed up in queues equal to or greater than the delay time threshold listed above then the contractor shall immediately review the construction operations which contributed directly to disruption of the traffic flow and make adjustments to the operations to prevent the queues from reoccurring. Traffic delays may be monitored by physical presence on site or by utilizing real-time travel data through the work zone that generate text and/or email notifications where available. The engineer monitoring the work zone may also notify the contractor of delays that require prompt mitigation. The contractor may work with the engineer to determine what other alternative solutions or time periods would be acceptable. When a Work Zone Analysis Spreadsheet is provided, the contractor will find it in the electronic deliverables on MoDOT's Online Plans Room. The contractor may refer to the Work Zone Analysis Spreadsheet for detailed information on traffic delays.

### **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:

12:00 noon July 2, 2021 – 6:00 a.m. July 6, 2021  
12:00 noon July 1, 2022 – 6:00 a.m. July 5, 2022  
12:00 noon June 30, 2023 – 6:00 a.m. July 5, 2023

**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** Jobs J6I3187 and J6I3427 will take place in the same vicinity as this project. These projects include I-55 bridge and pavement rehabilitation. Job J6I3471 will also take place IDOT contract 76K25 will also take place in isolated locations from the Mississippi River to IL 157 in Monroe and St Clair Counties. This contract is a patching project. This will require the contractors from all jobs to work together to complete each job withing the time specified within the contracts.

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

**4.1** When a changeable message sign (CMS) is provided, the contractor shall use the CMS to notify motorists of future traffic disruption and possible traffic delays one week before traffic is shifted to a detour or prior to lane closures. The CMS shall be installed at a location as approved or directed by the engineer. The CMS shall be capable of communication with the Transportation Management Center (TMC), if applicable, prior to installation on right of way. All messages planned for use in the work zone shall be approved and authorized by the engineer or its designee prior to deployment. When permanent dynamic message signs (DMS) owned and operated by MoDOT are located near the project, they may also be used to provide warning and information for the work zone. Permanent DMS shall be operated by the TMC, and any messages planned for use on DMS shall be approved and authorized by the TMC at least 72 hours in advance of the work.

**4.2** At least 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 law enforcement or other emergency agencies for incident management. In case of traffic accidents or the need for law enforcement to direct or restore traffic flow through the job site, the contractor shall notify law enforcement or other emergency agencies immediately as needed. The area engineer's office shall also be notified when the contractor requests emergency assistance.

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

Missouri Highway Patrol 636-300-2800		
City of Mehlville, MO	City of Columbia, IL	City of Lemay, MO
Fire: 314-894-0420	Fire: 618-281-5151	Fire: 314-631-4500
Police: 314-615-0162	Police: 618-281-5151	Police: 314-615-0162
Illinois State Police 618-346-3990		

**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.

Coordination may also be necessary with the Illinois Department of Transportation. For any land disturbance or SWPPP related questions or coordination, contact Joel Cumby at 618-346-3345, [Joel.Cumby@illinois.gov](mailto:Joel.Cumby@illinois.gov). Regarding incidents on the JB Bridge during construction, please contact Joseph Monroe at 618-346-3150 or [Joseph.Monroe@illinois.gov](mailto:Joseph.Monroe@illinois.gov) for coordination.

**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

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

Stuart McNeil, PE, Project Contact  
St. Louis District  
1590 Woodlake Drive  
Chesterfield, MO 63017

Telephone Number: 314-453-5042  
Email: [Stuart.McNeil@modot.mo.gov](mailto:Stuart.McNeil@modot.mo.gov)

Jeffrey Bohler, PE, Alternate Project Contact  
St. Louis District  
1590 Woodlake Drive  
Chesterfield, MO 63107

Telephone Number: 314-453-5052  
Email: [Jeffrey.Bohler@modot.mo.gov](mailto:Jeffrey.Bohler@modot.mo.gov)

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

F. Supplemental Revisions JSP-18-01R

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

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

Stormwater Compliance Requirements

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

stormwater, environmental, and land disturbance requirements specified elsewhere in the contract.

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

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

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

### **2.1 Duties of the WPCM:**

- (a) Be familiar with the stormwater requirements including the current MoDOT State Operating Permit for construction stormwater discharges/land disturbance activities; MoDOT’s statewide Stormwater Pollution Prevention Plan ( SWPPP); the Corps of Engineers Section 404 Permit, when applicable; the project specific SWPPP, the Project’s Erosion & Sediment Control Plan; all applicable special provisions, specifications, and standard drawings; and this provision;
- (b) Successfully complete the MoDOT Stormwater Training Course within the last 4 years. The MoDOT Stormwater Training is a free online course available at MoDOT.org;
- (c) Attend the Pre-Activity Meeting for Grading and Land Disturbance and all subsequent Weekly Meetings in which grading activities are discussed;
- (d) Oversee and ensure all work is performed in accordance with the Project-specific SWPPP and all updates thereto, or as designated by the Engineer;
- (e) Review the project site for compliance with the Project SWPPP, as needed, from the start of any grading operations until final stabilization is achieved, and take necessary actions to correct any known deficiencies to prevent pollution of the waters of the state or adjacent property owners prior to the engineer’s weekly inspections;
- (f) Review and acknowledge receipt of each MoDOT Inspection Report (Land Disturbance Inspection Record) for the Project within forty eight (48) hours of receiving the report and

ensure that all Stormwater Deficiencies noted on the report are corrected as soon as possible, but no later than stated in Section 5.0.

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

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

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

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

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

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

## COVID-19 Safety

**1.0 Description.** The coronavirus disease 2019 or COVID-19 has reached a pandemic stage across the United States, including the State of Missouri. To reduce the impact of COVID-19

outbreak conditions on businesses, workers, customers and the public, the contractor shall be aware of all COVID-19 guidance from the Center for Disease Control (CDC) and other government health mandates. The contractor shall conduct all operations in conformance with these safety directives. The guidance may change during the project construction and the contractor shall change and adapt their operation and safety protocols accordingly.

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

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

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

#### Anti-Discrimination Against Israel Certification

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

#### G. Contractor Quality Control NJSP-15-42

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

#### **2.0 Quality Control Plan.**

- (a) The name and contact information of the person in responsible charge of the QC testing.
- (b) A list of the QC technicians who will perform testing on the project, including the fields in which they are certified to perform testing.
- (c) A proposed independent third party testing firm for dispute resolution, including all contact information.
- (d) A list of Hold Points, when specified by the engineer.
- (e) The MoDOT Standard Inspection and Testing Plan (ITP). This shall be the version that is posted at the time of bid on the MoDOT website ([www.modot.org/quality](http://www.modot.org/quality)).

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

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

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

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

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

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

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

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

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

**4.3 Pre-Activity Meeting.** A pre-activity meeting is required in advance of the start of each new activity, except when waived by the engineer. The purpose of this meeting is to review construction details of the new activity. At a minimum, the discussion topics shall include: safety precautions, QC testing, traffic impacts, and any required Hold Points. Attendees shall include the engineer, the contractor superintendent and the foreman who will be leading the new activity. Pre-activity meetings may be held in conjunction with the weekly project meeting.

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

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

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

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

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

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

H. Bidding Requirements and Conditions JSP-98-14

**1.0 Purpose.** The purpose of this provision is to preserve the original bid records of the successful bidder (hereinafter referred to as the "contractor") and subcontractors with subcontracts on bridge items exceeding \$200,000, and the engineers' final estimate and calculations used to compute the final estimate for this project. This provision will only apply to bridges over the Mississippi and Missouri Rivers.

**2.0 Escrow of Bid Records.**

**2.1 Escrow of Contractor's Bid Records.** The contractor shall escrow the original documents, or suitable copies, of all bid records used by the contractor to prepare their bid. The contractor's bid records shall include all documents as specified in section 2.4 of this provision. The records shall be placed in escrow with an approved banking institution or bonded document storage facility (hereinafter referred to as a "document depository") in Jefferson City. As an alternative, a contractor having their principle place of business within the state of Missouri may escrow their own bid records. Should the contractor escrow their own bid records, then all risk of loss, damage or destruction shall be the contractor's. Should any bid records be lost, damaged or destroyed so as to be unavailable or unusable, the provisions of section 2.9.2 shall apply to preclude use of records or to bar the claim as provided in section 2.9.2.

**2.2 Escrow of Subcontractor's Bid Records.** If the successful bidder's proposal is based upon subcontracting any part of the work, the successful bidder shall then require each subcontractor with subcontracts in which the total value of the bridge items exceeds \$200,000 to comply with the requirements set forth in this provision for the contractor. The bid records of the subcontractor shall be submitted at the same time as the contractor's bid records in separate, marked containers. A separate affidavit as required by section 2.6 of this provision shall be signed by the individual subcontractor and shall accompany the subcontractor's bid records.



**2.3 Escrow of Commission's Records.** The original documents, or suitable copies, of the engineers' final estimates and calculations used to compute the final estimate will be escrowed by MoDOT.

**2.4 Bid Records.** In addition to the bid records as defined in Sec 101 of the standard specifications, the contractor shall furnish the schedule or order of work and the personnel and equipment loading plans developed for bidding purposes.

**2.5 Submittal of Bid Records.** Representatives of the contractor shall submit their bid records to the Commission's Secretary in one or more containers suitable for sealing, measuring no more than 13 1/2 inches [34.29 mm] by 20 inches [50.8 mm] by 29 inches [73.66 mm], no later than 4:00 p.m. on the fifth (5th) business day following award of the contract by the Commission. The contractor's container(s) shall be clearly marked "Bid Records" and show on the face of each container the contractor's name, address, vendor number, date of submittal, project number, job number, route and county.

**2.6 Submittal of Affidavit.** Each entity set out in section 2.0 of this provision shall submit an affidavit on a form furnished by the Commission, signed under oath by the representative(s) authorized to execute the affidavit, listing each bid record submitted by author, date, nature and subject matter. The affidavit shall attest to the following: (1) that the affiant has personally examined the bid records; (2) that the affidavit lists all the records relied upon by the contractor in preparing their bid, or in the case of the Commission, all the records relied upon by the engineer in computing the final estimate; (3) that all such records are included in the sealed container(s); and (4) that no record was developed, prepared or altered subsequent to the date the contractor delivered their sealed bid to the Commission's Secretary.

## **2.7 Verification.**

**2.7.1** Upon delivery of the contractor's original bid records to the office of the Commission's Secretary in Jefferson City, authorized representatives of the Commission and the contractor will meet at MoDOT support center building to verify the legibility of the documents and completeness of the documents listed in the inventory as described in the affidavit(s). The documents to be escrowed will be sequentially numbered at the time of the inventory, and those numbers will be recorded on the inventory. If a discrepancy is found, the contractor's representative shall, within three business days, provide the document as a supplemental to the escrow or provide a written response which explains why the document is unavailable or will not be provided. When a document needs to be added to the escrow, then representatives from both parties will meet at an agreed upon date and time at the document depository, or in the case of the contractor escrowing their own records, at the MoDOT Support Center building to add the document to the escrow.

**2.7.2** When the Commission determines, based upon the representation by the contractor in the affidavit, that the documents provided are complete, the Commission's representative(s) will immediately place the complete records and affidavit in one or more containers and will seal each such container in the presence of the contractor's representatives. The representatives of the Commission and the contractor will then deliver the sealed containers to the document depository selected by the Commission for placement in a safety deposit box, vault or other secured accommodations. If the contractor elects to escrow their own records, the sealed container(s) will be delivered to the contractor's secured location by the contractor's representative.

**2.8 Duration and Use.** The sealed documents and the original affidavits will remain in escrow without access by either party until deemed necessary by the Commission or the contractor to assist in the resolution of claims, contract terminations or litigation (collectively called a "claim").

**2.8.1** Representatives of the contractor and the Commission will be allowed to jointly make copies of the escrowed documents. All original documents will then be resealed and placed back in the document depository or the contractor's secured location.

**2.8.2** In the event of a claim, the original documents will remain in escrow. The Commission representatives may obtain and retain possession of copies of the contractor's escrowed bid documents. At the final resolution of litigation and exhaustion or conclusion of all appeals which could be brought as a result of the litigation, subject to the provisions of section 2.8.4, the Commission will promptly return all copies of the escrowed documents to the contractor.

**2.8.3** Should the contractor be the escrower of the bid records and shall fail after written notice to open the escrow container(s) to representatives of the Commission and permit copying of the records, the provisions of section 2.9.2 shall apply to bar use of the records and the claim.

**2.8.4** If the contractor should execute a binding release of all claims and potential causes of action related to the contract, which shall include all potential or pending claims or litigation which the contractor could possibly bring, for itself or any subcontractor or supplier, arising out of or relating to the contract, the Commission will inform the contractor in writing, with a copy to any depository with escrowed records for the project, that the escrow is terminated.

## **2.9 Refusal or Failure to Provide Bid Records.**

**2.9.1** Failure to provide a complete set of bid records or the required affidavit within the time specified shall constitute cause for the award of the Commission contract on this project to the contractor to be voided. The check or bid bond provided by the contractor in accordance with Sec 102.9 of the standard specifications shall be retained by the Commission as liquidated damages to compensate for the actual losses and delay the Commission will incur in awarding the contract to another bidder or in delaying the project. Delete Sec 103.3 of the standard specifications and substitute the following:

**103.3 Return of Bid Guarantee.** The bid guarantee, whether check or bid bond, of the low bidder will be retained until all bidding records have been escrowed by the contractor in accord with the terms of the bidding documents, the contract has been executed by the successful bidder, all insurance requirements met, and satisfactory contract bond furnished. The check of the low bidder will then be returned. If the bidder fails to comply with any of these requirements within the time allotted, the bid guarantee will be retained by the Commission as liquidated damages to compensate for the actual losses and delay the Commission will incur in awarding the contract to another bidder or in delaying the project. The proposal guarantee of the second low bidder will be retained until the Commission has determined that the award will not be made to the second low bidder. If errors or irregularities appear in the bid of either of the two apparent low bidders which create doubt as to the status of such bid, the bid guarantees of other bidders may be retained. When the two lowest bidders have been definitely established, the checks of the other bidders will be returned. Any

bid bond furnished as a bid guarantee will be returned only upon request of the bidder furnishing it. If an award is not made, all checks will be returned to the bidders.

**2.9.2** In accordance with the contractor's affidavit or revised affidavit, representing that their sealed container(s) placed in escrow contains all the material relied upon, developed or used in preparing the bid, the contractor agrees it will be precluded and specifically waives their right to introduce in evidence any bid records in any claim or litigation arising out of or relating to the contract which the contractor did not escrow. This waiver includes secondary evidence of the contents of the contractor's bidding records or evidence based in whole or part upon assumptions employed by the contractor in development of the bid or derived from them. Additionally, if during any claim or litigation arising out of or relating to the contract, it is discovered that bid records material to an issue were not escrowed by the contractor, that portion of the claim or litigation to which those bid records relate shall be noncompensable and nonsubmissible.

## **2.10 Confidentiality of Bid Records.**

**2.10.1** The contractor's bid records and affidavits in escrow are and will remain the property of the contractor. The Commission has no possession of, interest in or right to the bid records unless written notification of a claim, defined in section 2.8 of this provision, is received and Project Operations has determined in writing that access to the records is necessary. Subject to the provisions of section 2.10.3, the bid records and all copies made by the Commission will be returned to the contractor at the final resolution of litigation or final resolution of all claims for adjustment and execution of a binding release. In the event of a claim, any employee of the Commission who is involved in the claim review or in reviewing the facts related to the claim is authorized to have access to the bid records. Consultants who are used or retained by the Commission in the design of the project or in the evaluation of the claim will also have access to the documents but will be limited by a need to know the contents of them. The Commission will employ its best effort to ensure that the bid records will remain confidential from any third parties not having a need for access in resolution of a claim. The Commission employees or retained experts/consultants by the Commission will be prohibited from viewing, inspecting, copying, taking or otherwise using such records for personal or private benefit or for any other purposes beyond those for which they have been authorized by the Commission, the Chief Engineer, the claims committee or its legal counsel. The Commission will require any employee and consultant accessing escrowed records to sign a confidentiality statement acknowledging the confidentiality of the records.

**2.10.2** Copies of the contractor's bid records will be used by the Commission in the event of a claim. The bid records, when they are being used by the Commission, will be protected from disclosure because they are in the possession of and will be only used by the Commission for litigation or claims resolution. As a result, the contractor's escrowed bid records are not subject to review or disclosure pursuant to Chapter 610, RSMo.

**2.10.3** This provision shall not prohibit the disclosure of any bid records to appropriate federal or state law enforcement authorities relating to the investigation of a possible federal or state criminal offense or civil violation which may have been committed. The escrowed documents may be reviewed by state or federal law enforcement authorities, or by state or federal administrative agencies pursuant to consent by a party to this agreement, lawful search warrants, subpoenas, civil investigative demands, any lawful court order or in compliance with a statute or regulation.

### 3.0 Responsibilities of the Document Depository.

**3.1** The document depository is not an arbiter for any disputes which may arise between the contractor and the Commission involving the release of documents in the escrow or any other related dispute between the parties. If the document depository receives an order from any Missouri circuit or appellate court having lawful jurisdiction, the document depository will fully comply with the terms of that order regarding the distribution or disbursement of the documents it is holding in escrow. The document depository will be released from any liability to any party if the document depository has reasonably complied with the terms of the escrow agreement. If the document depository has any concerns about its authority to release escrowed documents, it may require a party to obtain a joint release from the Commission and the contractor, or an order from a court authorizing the release of the documents. Disputes may only be brought in the Circuit Court of Cole County, Missouri, as provided in Sec 105.17 of the standard specifications.

**3.2** The document depository may require any persons who appear as representatives of the Commission or the contractor to produce sufficient identification of their status before releasing either the copies of the escrowed documents or the original escrowed documents.

**3.3** Use of the term "Commission" in this provision when referring to acts of persons is not by way of limitation. Rather the Commission may act through employees of MoDOT in the performance of this provision.

**4.0 Cost and Escrow Instructions.** The cost of the escrow will be borne by the Commission if a third party document depository is used or by each party escrowing their own records. This cost will only include the cost of the establishment and the maintenance of the escrow with the document depository. The Commission and the contractor will each be responsible for their own costs incurred for the following items: any time involved in compiling the escrowed documents, conducting and preparing the inventory of documents, traveling to the office of Commission's Secretary to establish the escrow or to the document depository to review or inventory the escrowed documents, reviewing the documents in the event of a claim, photocopying the documents, and any related activities which result from the use of the escrowed documents. The Commission will provide escrow instructions to the document depository by a contract consistent with this special provision.

#### I. Utilities JSP-93-26F

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

<u>Utility Name</u>	<u>Known Required Adjustment</u>	<u>Type</u>
Ameren Missouri Russ Robertson Phone: (314) 992-9712 Email: rrobertson@ameren.com	See 2.0	Power

Lumen (Century Link) David Vega Phone : (917) 207-4604 Email: david.vega@lumen.com	See 3.0	Communications
AT&T Distribution Phone: (314) 439-4140	None	Communications
Charter Communications Phone: (636) 387-6661	None	Communications
MoDOT St. Louis District Phone: (317) 275-1500	None	Power, Communications
Missouri American Water Phone: (314) 996-2327	None	Water
Spire MO East Phone: (314) 706-2399	None	Gas
St Louis Metropolitan Sewer Phone: (314) 768-6262	None	Sewer

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

**2.0 Ameren Missouri.** Ameren Missouri has electric throughout the limits of the project. No planned adjustments of Ameren facilities are anticipated for this project.

**2.1 Service Disconnection.** The contractor will need to work closely with Ameren to determine the feasibility of service disconnection for the benefit of the project. Availability of disconnection will depend on the time of year, length of disconnection, and pole/lines requested.

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

No direct payment will be made for this provision. The contractor is responsible for any charges from Ameren Missouri for this provision and payment will be directly to Ameren Missouri.

**Contractor shall directly contact Ameren Missouri to verify location of facilities. The contractor shall coordinate construction activities with Ameren Missouri and take measures to ensure the integrity of the existing facilities are not disturbed. The contractor**

**shall protect the integrity of any existing facility in close proximity to contract work while performing construction activities.**

**There will be no direct pay for compliance to any of the above provisions.**

**The Commission cannot warrant the information above which was provided by Ameren Missouri.**

**3.0 Lumen (CenturyLink).** Lumen has existing parallel facilities throughout the limits of the project. While a utility investigation was not performed, as-built drawings indicated Lumen is located on the southern side of I-255 a distance of 4'-6' from edge of pavement. No planned adjustments of Lumen facilities are anticipated for this project.

**Contractor shall directly contact Lumen to verify location of facilities. The contractor shall coordinate construction activities with Lumen and take measures to ensure the integrity of the existing facilities are not disturbed. The contractor shall protect the integrity of any existing facility in close proximity to contract work while performing construction activities.**

**There will be no direct pay for compliance to any of the above provisions.**

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

**J. Guardrail Grading Requirements JSP-17-02B**

**1.0 Description.** Guardrail installation and grading shall be in accordance with Missouri Standard Specifications for Highway Construction, Missouri Standard Plans for Highway Construction, and as described herein.

**2.0 Construction Requirements.** When guardrail and/or end treatment removal and replacement require grading of the shoulder and/or slopes, Section 606.3.1(b), (c), and 606.3.1.1 of the Missouri Standard Specifications shall be waived and the following shall apply:

a) Along roadways and shoulders, remove no more guardrail than can be reconstructed within seven (7) calendar days, including weekends and holidays. The seven day counting period shall start when the first piece of safety hardware is removed.

b) The active work zone area that encompasses the guardrail and/or end treatment reconstruction, shall not exceed one (1) mile in length. The contractor shall be required to provide and maintain approved channelizing devices adjacent to the reconstruction area.

c) Only one-side of the roadway shall be worked on at the same time. Divided facilities shall be limited to work on one-side of each direction at the same time.

d) When the removal of any existing safety hardware device exposes non-breakaway obstacles, the reconstruction of the safety hardware device protecting the obstacle shall be replaced within 48 hours of removal or an approved temporary crashworthy device shall be provided, installed and maintained at the contractor's expense until the non-

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

e) Areas where guardrail and/or end treatments have been removed, but not yet replaced, shall be delineated in accordance with plans or as directed by the Engineer.

**3.0 Non-Compliance.** Non-compliance with this provision shall result in the immediate suspension of work in accordance with Sec 105.1.2. No work, including but not limited to additional guardrail removal and grading, shall be allowed to proceed except for work necessary to restore guardrail installation.

**4.0 Basis of Payment.** No direct payment will be made for compliance with this provision. Guardrail items, grading, and temporary traffic control devices will be paid for as provided in the contract.

K. Optional Pavements JSP 06-06G

**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/thinner*) 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 not be paid for separately but shall be included the pay item: Temporary Median Crossover East

**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 Subgrating and Shouldering.

L. Damage to Existing Pavement, Shoulders, Side Roads and Entrances

**1.0 Description.** This work shall consist of repairing any damage to existing pavement, shoulders, side roads, and entrances caused by contractor operations. This shall include, but not be limited to, damage caused by the traffic during contractor operations within the project limits including the work zone signing.

**2.0 Construction Requirements.** Any cracking, gouging, or other damage to the existing pavement, shoulders, side roads, or entrances resulting from general construction shall be repaired within twenty-four (24) hours of the time of damage at the contractor's expense. Repair of the damaged areas shall be as approved by the engineer.

**3.0 Method of Measurement.** No measurement of damaged pavement, shoulders or side roads, or entrances as described above shall be made.

**4.0 Basis of Payment.** No payment will be made for repairs to existing pavement, shoulders, side roads or entrances damaged by contractor operation

M. Pavement Marking Removal

**1.0 Description.** Pavement Marking Removal shall be in accordance with Section 620.50 and specifically as follows.

**2.0 Construction Requirements.** Removal of all pavement marking within the limits of temporary striping shall be as shown on the plans or as approved by the engineer. Pavement marking shall be completely removed to the satisfaction of the engineer with minimal damage to the pavement. The contractor shall use an approved **water blasting method** to remove the pavement marking on concrete surfaces. No more than five percent of the existing marking shall remain. The pavement surface shall not be left scarred with an image that might mislead traffic. Any excess damage or scarring of the pavement shall be repaired at the contractor's expense. It shall be the contractor's responsibility to determine what type of material needs to be removed.

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

**4.0 Basis of Payment.** The accepted quantity of pavement marking removal including all labor, equipment, and material necessary to remove the existing marking will be paid for at the contract unit price for the following pay item:



Item No.	Unit	Description
620-70.01	LF	Pavement Marking Removal

N. Temporary Striping

**1.0 Description.** This work shall consist of furnishing and installing the appropriate 6-inch white or yellow markings as shown in the plans. Additionally, within the limits of concrete paving or bridge deck temporary contrast pavement markings shall be applied where plans show a 6 inch single white temporary stripe separating lanes of traffic in the same direction.. Pavement marking removal shall be in accordance with JSP- Pavement Marking Removal.

**2.0 Material.** All material shall be in accordance with Section 620.10.2.2 and Division 1000, Material Details, and specifically as follows:

Item	Section
Standard Acrylic Waterborne Pavement Marking Paint	1048.20.1.1
Type P Drop-On Glass Beads	1048.30

**3.0 Construction Requirements.**

**3.1** All temporary paint within the project limits shall be maintained by the contractor as the contractor's expense in a manner approved by the engineer. All temporary paint shall be installed according to the manufacturer's recommendations.

**3.2** The contrast markings shall be accomplished by placing the black non-reflective pavement marking according to manufacturer's recommendations. The white marking shall be centered within the black marking such that there will be a 1.5-inch border of black on both sides of the white marking. Tolerances for the width and length of the black and white markings shall be in accordance with Sec. 620.20.1.5.

**4.0 Basis of Payment.** The accepted quantity of Temporary Pavement Marking will be paid at the contract unit price for each of the pay items included in the contract. There will be no direct payment for the contrast markings and it shall be considered incidental to the items shown below. All labor, equipment and material cost required to fulfill this requirement shall be included in the unit price for the following pay items:

Item No.	Unit	Description
620-99.03	LF	6 In. White Temporary Pavement Marking Paint
620-99.03	LF	6 In. Yellow Temporary Pavement Marking Paing

O. Temporary Barrier

**1.0 Description.** This work shall consist of all necessary operations for furnishing, installing and removing temporary concrete barrier as shown in the plans.

**2.0 Construction Requirements.**

- 2.1** Temporary concrete traffic barrier shall conform to the requirements of Sec. 617.
- 2.2** All temporary concrete traffic barrier shall be three-loop style.
- 2.3** All temporary concrete traffic barrier installed on roadway shall be anchored to the pavement using asphalt pin barrier system as noted and shown in the plans. All temporary concrete traffic barrier installed on bridge deck shall be anchored using tie-down straps per Standard Plan 617.20E. Temporary concrete barrier shall accommodate thermal movements at expansion joints of the I-70 eastbound and westbound Blanchette Bridges.
- 2.4** All barrier and appurtenances shall remain the property of the contractor.
- 2.5** Delineators shall be placed on all temporary concrete traffic barrier on the top and both sides, spaced at 25-foot intervals and shall meet all other requirements of Sec 617.30.
- 2.6** The top 12 inches of anchorage holes placed in the roadway pavement shall be filled after removal of the asphalt pin with an approved bituminous pavement crack sealant per Sec 413.50.2. Anchorage holes placed in the bridge deck for tie-down straps shall be filled with epoxy mortar after removal of the bolt per Standard Plan 617.20E. Any excess damage or scarring of the pavement due to the installation or removal of anchors shall be repaired at the contractor's expense.
- 2.7** Any hardware left in the existing Westbound or Eastbound bridge decks from the tie-down straps shall be stainless steel.
- 2.8 Steel Barrier Alternate.** As an alternate to temporary concrete traffic barrier, a temporary steel traffic barrier system may be used. The steel barrier alternate system must be documented as MASH (Manual for Assessing Safety Hardware) approved. The Contractor shall submit details and letter of MASH compliance of the proposed steel barrier system to the Engineer for approval. It is the Contractor's responsibility to modify the traffic control plans and bridge staging details for the Eastbound and Westbound bridges to accommodate the width of the steel barrier system and its accepted crash tested deflections and submit the modified plans to the Engineer for approval. The Contractor shall submit to the Engineer for approval the locations and details of pinned anchorages of the steel barrier system. The anchor type, size and spacing must match that used in the MASH accepted testing or be certified by the manufacturer to provide equal or greater anchorage strength to that provided for the test installations.
- 3.0 Materials.** All material shall be in accordance with Division 1000, Material Details, and specifically as follows:

Item	Section/Specification
Temporary Concrete Barrier	1064
Anchor Bolts	ASTM A 307
Bituminous Pavement Crack Sealant	AASHTO M 324
Type III Epoxy	1039
Sand for Mortar	1039

**4.0 Measurement.** Measurement of temporary traffic barrier and relocated temporary traffic barrier will be made to the nearest 1/2 linear foot for each continuous length and totaled to the nearest linear foot for the sum of the lengths.

**5.0 Basis of Payment.** Payment for all labor, equipment, and material costs to install temporary concrete traffic barrier, provide and maintain delineators and remove the temporary concrete traffic barrier from the project shall be completely covered by item numbers:

Item No.	Unit	Description
617-36.00D	LF	Temporary Traffic Barrier, Contractor Furnished / Retained
617-37-00B	LF	Temporary Traffic Barrier Anchored, Contractor Furnished / Retained
617-50-10A	LF	Relocating Temporary Traffic Barrier
617-50-11B	LF	Relocating Temporary Traffic Barrier Anchored

Any work associated with the installation and removal of the temporary concrete barrier including pre-drilling and filling anchorage holes shall be considered to be completely covered by the contract unit prices.

P. Temporary Median Crossover - East

**1.0 Description.** This work shall consist of preparation of the site, furnishing of all materials, installation, maintenance, and complete removal of the temporary median crossover to be located on the East side of the Mississippi River as shown in the plans as well as restoration of the site to preconstruction conditions. This work shall include Optional Pavement, 4" Type 5 Base, Class A Excavation, Crushed Stone (B), Compacting in Cut, Type 5 Aggregate, Temporary Guardrail, adjusting inlet, and Seeding. This work shall also include the installation and removal of temporary guardrail as shown in the plans and the removal of the reflectors in the raised reflective pavement markers that conflict with the revised temporary traffic patterns. This work shall also include the installation of new reflectors when returning to normal traffic patterns. Reflectors shall be in accordance with Illinois Department of Illinois Standard 781001-04 and Illinois Department of Transportation Standard Specifications for Road and Bridge Construction Section 781. Any raised reflective pavement markers damaged during construction shall be replaced in accordance with Section 781 of the Illinois Department of Transportation Standard Specifications for Road and Bridge Construction.

**2.0 Construction Requirements.**

**2.1** The temporary median crossover shall be constructed as shown in the plans. Existing roadway improvements in the median not shown for removal shall not be disturbed. Any damage to existing improvements that are to remain shall be repaired or replaced in kind at the Contractor's expense.

**2.2** The median crossover area shall be cleared and grubbed in accordance with Section 201 prior to placement of compacted embankment and temporary pavement.

Removal of the temporary median crossover shall include restoring the median to original grade and conditions. Temporary pavement and compacted embankment shall be removed as shown in the plans to the original grade of the median. Area shall be fine graded and restored, seeded and mulched. Adjusted inlet shall be returned to its original elevation with the existing grate. A new grate shall be provided by contractor if the existing grate is damaged. Any damage to existing roadway improvements during restoration activities will be considered the responsibility of the Contractor and shall be repaired or replaced in kind at the Contractor's expense.

**2.3 Seeding** shall be Class 2 in accordance with the Illinois Department of Transportation Standard Specifications for Road and Bridge Construction Section 250. Fertilizer shall be in accordance with Section 250 of the Illinois Department of Transportation Standard Specifications for Road and Bridge Construction. Mulch shall be Mulch Method 2 in accordance Illinois Department of Transportation Standard Specifications for Road and Bridge Construction Section 251.

**3.0 Materials.** All material shall be in accordance with Division 1000, Material Details and Sections 1081 and 1096 of the Illinois Department of Transportation Standard Specifications for Road and Bridge Construction.

**4.0 Basis of Payment.** All labor, equipment, and material costs to complete the described work not shown separately under other pay items shall be completely covered by item number:

Item No.	Unit	Description
402-99.01	LS	Temporary Median Crossover East

Q. Temporary Median Crossover - West

**1.0 Description.** This work shall consist of all materials, installation, maintenance and well as restoration of the temporary median crossover to be located between the Telegraph Rd interchange and the Koch Rd interchange as shown in the plans. This work shall include preparation of site and filling existing rumble strips with Polyester Polymer Concrete (PPC),

**2.0 Construction Requirements**

**2.1** The temporary median crossover shall be constructed as shown in the plans. Existing roadway improvements in the median not shown for removal shall not be disturbed. Any damage to existing improvements that are to remain shall be repaired or replaced in kind at the Contractor's expense. Surface preparation shall in in accordance with 505.70.6.

**2.2** Removal of the temporary median crossover shall include restoring the median to original grade and conditions. Any damage to existing roadway improvements during restoration activities will be considered the responsibility of the Contractor and shall be repaired or replaced in kind at the Contractor's expense.

**3.0 Materials.** All material shall be in accordance with Division 1000, Material Details, and specifically as follows:

Item	Section/Specification
Polyester Polymer Wearing Surface	1039

**4.0 Basis of Payment.** All labor, equipment, and material costs to complete the described work not shown separately under other pay items shall be completely covered by item number:

Item No.	Unit	Description
402-99.01	LS	Temporary Median Crossover West

R. Trench Drain

**1.0 Description.**

**1.1** This work shall consist of furnishing and installing a new trench drain, grates and connection to existing drop inlet. Trench drain assembly can be POLYCAST Series 900 Pre-Sloped Trench Drain System with POLYCAST Heavy Duty Ductile Iron Grate & Frame (Non-Removable); ACO HighwayDrain HD200; or approved equal.

**1.2** Trench drain shall have a nominal width of 6 inches.

**2.0 Material.** All material shall be in accordance with Division 1000, Material Details, and specifically as follows.

**2.1 Trench Drain.** All materials shall meet or exceed AASHTO H-20 loading criteria.

**2.1.1 Grates.** Grates shall be ductile iron or other durable material that meets or exceeds AASHTO H-20 loading criteria. Grates shall have a minimum open area of 60%

**3.0 Construction Requirements.**

**3.0.1** All work shall be performed in accordance with the Trench Drain manufacturer's recommendations and as approved by the engineer.

**3.1.2** Trench drain shall either be pre-sloped at a minimum slope of 0.50% or installed at a slope meeting 0.50%.

**3.1.3** Contractor is required to install non-removable grates within the limits shown on the plans. Grates shall be affixed in a manner that reduces the chance of being dislodged by traffic. Bolting or other locking devices are not acceptable.

**3.1.4** Contractor is required to modify the existing drop inlet and provide a drainage connection from the trench drain to facilitate drainage into the existing system as shown on the plans. Contractor shall also clean out all debris from the existing inlet and flush the inlet and pipe run to ensure proper drainage.

**3.1.5** Trench drain finished grade should match grade of temporary overlay as directed by the Engineer.

**4.0 Method of Measurement.** Final measurement will not be made.

**5.0 Basis of Payment.** Payment will be made for compliance with this provision including all labor, equipment and material necessary with installation of the trench drain assembly at the contract unit price for the following pay item:

Item No.	Unit	Description
604-99.01	LS	Trench Drain

S. Relap Guardrail

**1.0 Description.** This work shall consist of disconnecting and reinstalling (relapping) previously installed guardrail. Guardrail will be relapped for temporary traffic control phases and upon

completion of traffic control phase where direction of travel changed, guardrail is to be returned to pre-project lap configuration.

**2.0 Material.** All material required shall conform specifically as follows:

Item	Section
Guardrail, end terminals, one-strand access restraint cable and three- strand guard cable material	1040

**3.0 Construction Requirements.** All work shall conform to the requirements of Sec 606.

**4.0 Method of Measurement.** Measurement for relapping guardrail shall be at the contract lump sum price which shall include the disconnecting previously installed guardrail and reinstalling guardrail consistent with the new direction of traffic flow.

**5.0 Basis of Payment.** This work will be paid for at the contract lump sum price for relapping guardrail and shall be considered to be completely covered by:

Item No.	Unit	Description
606-99.01	LS	Misc. – Relap Guardrail

T. Office for the Engineer

**1.0 Description.** This work shall consist of furnishing and maintaining an office for the engineer in accordance with the contract.

**2.0 Construction Requirements.**

**2.1** The contractor shall provide the office as the first order of work. The office shall be located on the project right of way unless another suitable location is approved by the engineer. The office may be solely for the use of the engineer or the engineer may be co-located with the

contractor in the same facility. If co-located, it must be capable of being secured independently, have its own street access and be adequately separated to allow for private conversation.

**2.2** Unless otherwise approved by the engineer, the office shall consist of one trailer with minimum outside dimensions of 10 x 40 feet (3 x 12 m), excluding hitch. The trailer shall have sanitary facilities, telephone service, a separate enclosure for the Resident Engineer and other facilities required in the contract. This trailer shall be so constructed as to provide finished

walls, floor covering, adequate lighting fixtures and a minimum number of partitions or attachments which will reduce the effective working area.

**2.3** The trailer shall be weatherproof, insulated and with central air-conditioning and heating facilities capable of maintaining a temperature of 72 F (22 C).

**2.4** Adequate light, both artificial and natural, along with a sufficient number of windows to provide acceptable ventilation, shall be provided. All doors and windows shall be equipped with vandal resistant grills and locking devices. Electric, water and sanitary hookups shall be provided.

**2.5** Furniture in acceptable condition shall be provided by the contractor in the following quantities:

4 - Desks	2 – 8' Folding Tables
10 - Chairs (folding type)	4 - Swivel Chairs
1 - Electric Water Cooler	1 – Dry Erase Board (4' x 8')

**2.6** The contractor shall furnish four 10 pound (4.5 kg) dry chemical type fire extinguishers, including refills and inspection as necessary, and aggregate surfaced parking area of sufficient capacity for eight vehicles. If specified in the contract, the contractor shall furnish and install a 6 foot (1830 mm) chain-link fence.

**2.7** The contractor shall furnish disposable cups, water and any other supplies necessary for the water cooler.

**2.8** The trailer, equipment and furnishings shall remain the property of the contractor, and after being vacated by the Resident Engineer, all portions of the installation on the right of way shall be promptly removed. The right of way shall be restored to a satisfactory condition.

**3.0 Basis of Payment.** The accepted office for engineer complete with furnishings, maintenance, all utilities and heating facilities, including operation and fuel, fence if required, ground rentals, labor, tools, supplies and removal, will be paid for at the contract unit price:

Item Number	Unit	Description
615-10.00	LS	Office for Engineer

U. Temporary Traffic Control (Lump Sum)

**1.0 Description.** All work necessary to maintain safe and efficient traffic flow through the work areas shall be provided by the contractor. This will include furnishing, relocating, and

removing temporary traffic control devices, truck mounted attenuators and equipment, and the removal and relocation or covering and uncovering of existing signs and other traffic control devices in accordance with the contract documents or as directed by the engineer.

**2.0 Work requirements.** Work shall be in accordance with Sec 612, 616, 619, 620 and the contract plans.

**3.0 Method of Measurement.** No additional payment will be made if the contractor chooses to add additional work zones at the same time. The quantities shown provided shall be considered an estimate and may be subject to change based on field conditions and the contractor's staging plan and should be bid accordingly. This work will not be measured for payment, but will be considered a lump sum unit. Any Value Engineering proposals to the temporary traffic control will not be paid for through value engineering but will be covered under Temporary Traffic Control, lump sum.

#### **4.0 Basis of Payment.**

4.1 Partial payments will be made as follows:

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

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

(c) The third partial payment will be made when 75 percent of the original contract amount is earned. This payment will be the lesser of 20 percent of the original contract price for the item of temporary traffic control or 2 percent of the original contract price.

(d) When the engineer has accepted the contract for maintenance in accordance with Sec 105, the remaining contract price for the item of temporary traffic control will be paid.

(e) The above partial payment schedule may be adjusted by the engineer if proof of invoices submitted by the contractor demonstrate additional temporary traffic control costs were incurred earlier than the above proposed schedule. The total payment for temporary traffic control will not exceed the bid amount for Temporary Traffic Control, lump sum, unless covered by a cost change order as referenced in the following Section 4.3.

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

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

Item No.	Unit	Description
617-99.01	LS	Temporary Traffic Control

#### **V. Prime Contractor Requirements**



**1.0** The limitation in Sec 108.1.1 of the Missouri Standard Specifications for Highway Construction that "the contractor's organization shall perform work amounting to not less than 40 percent of the total contract cost" is waived for this project. Instead, for the purposes of constructing this project only, the less restrictive terms of the Federal Highway Administration's rule at Title 23 Code of Federal Regulations (CFR) § 635.116(a) shall apply, so that the contractor must perform project work with its own organization equal to not less than 30 percent of the total original contract price. All other provisions in Sec 108.1.1 et seq. of the Missouri Standard Specifications for Highway Construction shall remain in full force and effect, and shall continue to govern the contractor and its subcontractors, in accordance with the provisions of Title 23 CFR § 635.116

W. Liquidated Damages Specified

**1.0 Description.** The earliest date to close Bridge A4936 and the SB Bridge A2590 is April 1<sup>st</sup> 2022. Construction of these bridges should be completed and traffic returned to normal traffic patterns by December 15, 2022. The earliest date to close Bridge A1850 and the NB Bridge A2590 is April 1<sup>st</sup> 2023. Construction of these bridges should be completed and traffic returned to normal traffic patterns by December 1, 2023. If construction is not completed by these dates and traffic returned to normal traffic patterns, 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.

**2.0 Liquidated Damages Specified for Failure to Complete Work on Time.** These costs are not reasonably capable of being computed or quantified. Therefore, the contractor will be charged with liquidated damages in the amount of \$1,000 per day for each full day that the ramps remain closed and \$10,000 per day for each full day the bridges remain closed in excess of the limitation as specified. It will be the responsibility of the engineer to determine the quantity of excess closure time.

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

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

**5.0** Necessary work refers to roadway features including but not limited to completion of bridge barrier, guardrail, and other items necessary for the proper functioning of the roadway and safe passage of vehicular traffic.

X. Union Pacific Railroad Requirements

**1.0 Introduction.**

**1.1** These Railroad Requirements set forth terms and conditions agreed upon between the Union Pacific Railroad Company (Railroad) and the Missouri Highways and Transportation Commission (Commission), under which the Railroad will allow the Commission's contractors to enter in and

upon the Railroad's real property, right of way, tracks and other facilities (Railroad's Property) to perform the contractor's work relating to this project.

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

**1.3** The project location is at Railroad Milepost 5.51 on Railroads Desoto Subdivision, designated as USDOT Crossing # 424957P. **Current FRA data shows 3 daytime trains per day and 2 nighttime trains per day and 3 passenger trains per day.**

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

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

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

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

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

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

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

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

**3.1** The contractor agrees to indemnify, defend and hold harmless the Railroad from and against any injury or death of persons whomsoever, or from any loss or damage to the Railroad's Property, caused by acts or omissions of the contractor in performing work on this project, whether on, over, under or in the vicinity of the Railroad's Property. In the event the contractor shall fail to restore the Railroad's Property immediately to a condition acceptable to the Railroad when any such loss or damage to the Railroad's Property is called to the contractor's attention by the Railroad, then the Railroad may perform such corrective work at the cost of the contractor. The Railroad shall have the right to bring an action directly against the contractor to recover any loss or damage sustained by the Railroad by reason of the contractor's breach of agreements contained in these Railroad Requirements. In addition to such remedies of the Railroad, the Commission will

withhold from final payment due to the contractor the amount reasonably necessary to reimburse the Railroad for such loss or damage or for performing such work. The term "loss or damage" as used herein shall include, but not be limited to, the erosion and silting of, water damage to, and the accidental or intentional placing or dropping of objects on the Railroad's Property.

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

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

**4.1.1** At least ten (30) days in advance of the date the contractor proposes to begin work on the Railroad's Property, the contractor has given written notice of the contractor's proposed start date and time to the Railroad Representative, and Railroad's Manager of Track Maintenance (see paragraph 12.2.3 below), with a copy to the Engineer.

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

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

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

**4.2 Right of Entry.** At least thirty (30) days in advance of the date the contractor proposes to begin work on the Railroad's Property, the contractor shall enter into a Contractor's Right of Entry Agreement (CROE) with Railroad prior to working on Railroad property. Submit the following information to the Railroad Representative:

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

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

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

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

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

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

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

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

**5.4** If conditions arising from, or in connection with the work require immediate and unusual provisions to protect the Railroad's operations and property, the contractor shall make such provisions. If in the judgment of the Railroad Representative, or the Engineer if the Railroad Representative is absent, such provision is insufficient, then the Railroad Representative or Engineer may require or provide such provisions as he/she deems necessary. In any event, the contractor shall make such provisions at the contractor's expense, and without cost to the Railroad or the Commission.

## **6.0 Track Clearances.**

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

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

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

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

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

## **7.0 Construction Procedures.**

**7.1. General.** The contractor's work on the Railroad's property shall be performed in accordance with these Railroad Requirements and shall be subject to the Railroad's inspection and review. The contractor shall submit plans that shall be signed, sealed, and stamped in accordance with the laws relating to Architects and Professional Engineers, Chapter 327, RSMo, for the demolition of any structure over Railroad right of way, and for temporary shoring and falsework that may affect the Railroad's facilities or traffic.

**7.2 Excavation.** The contractor shall maintain the subgrade of an operated track with the beam edge at least 12 feet from centerline of track and not more than 26 inches below top of rail, unless the existing section fails to meet this specification, in which case the contractor shall maintain the existing section.

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

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

**9.1** The contractor shall obtain permission from the Railroad Representative before storing any materials or equipment anywhere on Railroad's Property. The Railroad will not ordinarily permit storage within twenty-five feet (25') from the centerline of any track, or within three hundred feet (300') from any grade crossing. The Railroad will not be liable for damage to such material and equipment from any cause, and the Railroad Representative may move such material and equipment or require the contractor to move it, at the contractor's expense.

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

**10.0 Cleanup.** Upon completion of the work, the contractor shall remove from within the limits of the Railroad's Property all machinery, equipment, surplus materials, falsework, rubbish or temporary buildings of the contractor's and shall leave Railroad's Property in a neat condition satisfactory to the Railroad Representative.

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

for repairing damages to the Railroad's Property or to property of the Railroad's tenants, caused by or resulting from the operations of the contractor relating to this project.

## **12.0 Flagging Services.**

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

**12.1.1** In general, the Railroad may require flagging services whenever the contractor's personnel or equipment are, or are likely to be, working on the Railroad's Property, or across, over, adjacent to, or under a track, or when such work has disturbed or is likely to disturb a railroad structure or the railroad roadbed or surface and alignment of any track to such extent that the movement of trains must be controlled by flagging, to prevent unreasonable risks of accidental hazard to the Railroad's operations or personnel.

**12.1.2** Normally, the Railroad will assign one flagger to a project; but in some cases, more than one may be necessary, such as yard limits where the Railroad may assign up to three flaggers. However, if the contractor works within distances that violate instructions given by the Railroad Representative, or performs work upon or adjacent to Railroad's Property that has not been scheduled with the Railroad Representative, the Railroad may require flagging services full time until the project is completed.

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

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

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

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

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

Jared Treaster - Manager of Track Maintenance  
573-218-4382 (cell)

[Jtreast@up.com](mailto:Jtreast@up.com)

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

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

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

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

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

**12.3.2** The estimated cost of flagging services is approximately \$1,400 per day, based on an 8-hour workday and a 40-hour work week. The Railroad shall charge not more than its actual cost of providing these flagging services, which includes the base pay for the flagger or flaggers who actually performed the required flagging services, the Railroad's reasonable overhead costs, and the reasonable costs actually incurred for the flagger's travel expenses, meals and lodging if required. The Railroad may charge a maximum of one hour of travel time each way per day per flagger, for travel to and from the job site. A flagger's work in excess of 8 hours per day or 40 hours per week, but not more than 12 hours per day, will result in overtime pay at 1.5 times that employee's regular hourly rate. A flagger's work in excess of 12 hours per day will result in overtime pay at 2.0 times that employee's regular hourly rate. If a flagger performs required flagging services on a holiday, then the overtime pay rate shall be 2.5 times that employee's

regular hourly rate. The Commission or contractor also shall reimburse the Railroad for its actual expenses reasonably incurred in preparing and handling invoices to the Commission or contractor for the cost of these flagging services. The Railroad's charges to the Commission or contractor shall comply with applicable provisions of the current FAPG issued by the FHWA.

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

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

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

### **13.0 Temporary Construction Grade Crossing.**

**13.1** When the contractor has no reasonable alternate method of transporting construction materials and personnel across the Railroad's track, the contractor shall make all necessary arrangements with the Railroad for the installation, maintenance, and removal of one temporary grade crossing for a construction haul road. The contractor shall bear all costs incidental to such crossings, including flagging, whether services are performed by contractor's own forces or by the Railroad's personnel. The contractor shall execute the Railroad's standard Road Crossing Agreement covering terms and conditions for the temporary crossing.

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

**14.0 Work for the Benefit of the Contractors.** The project plans show all temporary or permanent changes in wire lines or other facilities that are necessary to complete the project, or these changes will be covered by appropriate plan revisions approved by the Commission and the Railroad. If the contractor desires any further changes, the contractor shall make separate arrangements with the Railroad for those changes, at the contractor's expense.

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



**15.1** Any work the Railroad performs.

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

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

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

## **17.0 Insurance.**

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

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

**17.3 Business Automobile Coverage Insurance.** The contractor shall maintain business auto coverage written on ISO form CA 00 01 (or a substitute form providing equivalent liability coverage) with a combined single limit of not less than \$5,000,000 for each accident. The policy must contain the following endorsements, which must be stated on the certificate of insurance: "Coverage For Certain Operations In Connection With Railroad's" ISO form CA 20 70 10 01 (or a substitute form providing equivalent coverage) showing "Union Pacific Property" as the Designated Job Site; and Motor Carrier Act Endorsement - Hazardous Materials Clean Up (MCS-90) if required by law.

**17.4 Alternate Liability Insurance Limits.** Instead of the minimum limits of insurance coverage described above in subsections 17.2 and 17.3, Railroad will accept CGL insurance limits of at least \$2,000,000 for each occurrence or claim and an aggregate limit of at least \$2,000,000, and will accept Business Automobile Insurance containing a combined single limit of at least \$2,000,000 per occurrence or claim, if the contractor will secure Railroad Protective Liability Insurance coverage with a combined single limit of \$5,000,000 per occurrence and an aggregate limit of \$10,000,000. The contractor's election to maintain these alternate liability insurance limits

shall not affect the applicability of any other terms and conditions set forth in these Railroad Requirements.

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

**17.6 Railroad Protective Liability Insurance.** The contractor must maintain Railroad Protective Liability insurance written on ISO occurrence form CG 00 35 12 04 (or a substitute form providing equivalent coverage) on behalf of the Railroad as named insured, with a limit of not less than \$5,000,000 per occurrence and an aggregate limit of \$10,000,000. Before commencing any work on the Railroad's Property, the contractor shall submit the original insurance policy to the Railroad, or may submit a binder stating that the required Railroad Protective Liability policy is in place until the contractor delivers the original policy to the Railroad. The contractor shall cause the Railroad Protective Liability Insurance policy to include a description of the named insured, the work, and the job site, as follows:

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

**17.6.2** Description and Designation:

Rehab Southbound MoDOT bridge A4936 and Northbound bridge A1850

Route I-255 in St. Louis County

Job No. J6I3413

USDOT # 445896J MP 10.70 on the Desoto Sub near Lemay, MO.

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

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

**17.9 Other Insurance Requirements.**

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

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

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

**17.9.4** Prior to commencing any work on the Railroad's Property, the contractor shall furnish the Railroad with one or more certificates of insurance, executed by a duly authorized representative of each insurer, showing compliance with the insurance requirements set forth in this Section 17.0.

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

**17.9.6** The fact that insurance is obtained by the contractor or by the Railroad on behalf of the contractor will not be deemed to release or diminish the liability of the contractor, including, without limitation, liability under the indemnity provisions contained in Section 3.0 of these Railroad Requirements. Damages recoverable by the Railroad from the contractor or any third party will not be limited by the amount of the required insurance coverage, except to the extent of any payments the Railroad has received pursuant to that insurance coverage obtained and paid for by the contractor.

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

Railroad

Mr. Casey Moore  
Real Estate  
Union Pacific Railroad Company  
1400 Douglas St., MS 1690  
Omaha, NE 68179-1690

Commission

Mr. Dave Ahlvers  
State Construction and Materials Engineer  
Missouri Department of Transportation  
P.O. Box 270  
Jefferson City, MO 65102

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

**17.12 Insurance Required of Subcontractors.** If any part of the work is sublet, the contractor shall maintain and provide evidence of similar insurance, in the same amounts as required of the

prime contractor, to cover the subcontractor's operations. The Railroad will accept endorsements to the prime contractor's policies specifically naming subcontractors and describing the subcontractor's operations, for this purpose.

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

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

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

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

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

**Payment for flagging fees.**

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

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

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

Y. Temporary Lighting

**1.0 Description.** Temporary lighting shall consist of furnishing, installing and maintaining wood poles, luminaires, bracket arms, power cable, connection to a power source, mounting hardware and all other material necessary to provide the temporary installation. Any Commission furnished items shall be installed by the contractor. Temporary lighting specified as part of a temporary signal installation shall be installed on the signal poles unless otherwise shown on the plans.

**2.0 Work requirements.** Work shall be in accordance with Sec 901.2

**3.0 Method of Measurement.** Final measurement for furnishing, installing and maintaining wood poles, luminaires, bracket arms, power cable, connection to a power source, mounting hardware and all other material necessary to provide the temporary installation will be made as a lump sum measurement and is incidental to Temporary Median Crossover – East and Temporary Median Crossover - West

**4.0 Basis of Payment.** The accepted quantity of temporary lighting will be incidental to the cost of Temporary Median Crossover – East and Temporary Median Crossover – West.

Z. Class A Partial Depth Concrete Pavement Repair Using Hot Applied Polymer Modified Repair Material NJSP-19-01

**1.0 Description.** This work shall consist of removal, furnishing, and placing material to repair existing concrete pavement by performing partial depth concrete pavement repairs as specified in plans or as approved by the engineer. All work shall be in accordance with Section 613 except as herein modified.

**2.0 Construction Requirements.**

**2.1** Individual repair areas shall be limited to approximately 24 square feet in area. Repair areas larger than 24 square feet shall be patched with a cementitious based material in accordance with Section 613.

**2.2** Removal of the existing patched, spalled, delaminated, or otherwise deteriorated concrete surface shall be limited to 1/3 (one third) of the pavement thickness or 4 inches, whichever is less. Removal of concrete shall be accomplished with light jack hammers and/or a mill head designed for concrete milling. All loose materials, including milled or broken concrete or asphalt, crack seal materials, oil, sand, dust, grit, or other contaminants, shall be completely removed. Removal of material shall be in accordance with Sec 202.2.

**2.3** All surfaces shall be cleaned with compressed air at a minimum of 100 psi.

**2.4** Partially exposed reinforcing steel mesh shall be sandblasted clean or removed before placing patch materials. If sandblasting is used, all surfaces shall be cleaned of loose sandblasting grit with compressed air.

**2.5** All surfaces of the repair area shall be primed using a primer and procedure recommended and approved by the manufacturer. Any costs related to primer shall be included in the unit cost. No direct payment will be made for the priming of the repair areas.

**2.6** Material shall be placed in 1inch lifts until the repair is level with the existing pavement. Each lift shall be adequately cooled, based on manufacturer recommendations, prior to subsequent lift placement.

**2.7** Repairs that are greater than 1 inch in depth require the addition of bulking aggregate 20% to 50% by volume, as recommended by the manufacturer. The bulking stone shall be double washed, dust-free 5/8 inch to 1 inch sized granite. The bulking aggregate shall be adequately

heated and dried prior to placement. No direct payment will be made for costs associated with bulking stone placement.

**2.8** Topping stone shall be placed on the surface of the patch to improve surface friction using a procedure recommended by the manufacturer. The topping stone shall be double washed, dust-free, angular, hard aggregate. The topping stone shall be adequately heated and dried prior to placement. No direct payment will be made for costs associated with topping stone placement.

**2.9** Traffic shall not be allowed on the repair area until the patching material has adequately cooled and gained strength, as recommend by the manufacturer.

**2.10** Repair areas in the roadway and shoulders shall be swept clean of all loose debris before opening to traffic.

**2.11** Any patches that vary by more than ¼ inch from the existing profile of the roadway or of poor workmanship shall be removed and replaced by the contactor at the contractor's expense.

### **3.0 Material Requirements.**

**3.1** The contractor shall submit the manufacturer's specifications for the material for patching and repair to the engineer for approval. The contractor shall follow manufacturer's specifications for material preparation and placement.

**3.2** Material shall be hot pour, polymer modified, resin-based concrete repair material, flexible and grey in color. Material shall provide an impermeable, voidless mass at ambient temperatures. Material is to be mixed and heated on site as recommended by the product manufacturer. The repair material shall be factory blended and in meltable bags.

**4.0 Additional or Reduced Work.** If additional repair work is necessary beyond what is specified in the work order or the required repair is not as extensive as originally viewed, the contractor shall contact the engineer for authorization to proceed with the additional or reduced work. The contractor shall note that with this authorization to proceed with additional or reduced work may change which unit bid item is used to calculate final payment depending on final repair quantities. Any work performed without authorization of the engineer shall be at the contractor's expense.

**5.0 Method of Measurement.** Measurement shall be made to the nearest pound based on the actual material used with an acceptable form of package documentation.

**6.0 Basis of Payment.** Payment shall be paid by the pound and shall be full compensation for all repair work including removal of loose materials, cleaning of concrete surface, and furnishing and placing material for Class A Partial Depth Pavement Repair using flexible, hot polymer-modified repair material. All cost for the repair work, including labor, equipment, materials, and containment and disposal of material shall be included in Item 613-99.11, Class A Partial Depth Concrete Pavement Repair Using Flexible, Hot Polymer Modified Repair Material, per pound.

**AA. Weld Drainage Grates****1.0 Description.**

1.1 This work shall consist of modifying the inlet grate on the proposed trench drain such that the grate be fixed to the frame of the inlet in a manner that allows traffic to traverse the inlet without the probability of the grate separating from the frame during traffic. Weld shall be removed prior to completion of project.

**2.0 Construction Requirements.**

3.0.1 All work including method and materials required to attached the grate to the frame shall be approved by the engineer prior to work being performed.

**4.0 Method of Measurement.** Final measurement will not be made.

**5.0 Basis of Payment.** Payment will be made for compliance with this provision including all labor, equipment and material necessary at the contract unit price for the following pay item:

Item No.	Unit	Description
604-99.01	LS	WELD DRAINAGE GRATES

**BB. Concrete Traffic Barrier, Type C, Transition**

**1.0 Description.** This work shall consist of constructing permanent concrete traffic barrier transitions as shown on the plans or as directed by the engineer.

**2.0 Material.** All reinforcing steel shall be Grade 60 deformed bar, and all reinforcing steel and dowels shall be epoxy coated. All material shall be in accordance with Division 1000, Material Details, and specifically as follows

Item	Section
Reinforcing Steel for Concrete	1036
Concrete Curing Material	1055
Dowel Bars	1057
Preformed Fiber Expansion Joint Material	1057
Joint Sealer	1057
Joint Filler	1057
Prestressing Strands	AASHTO M 203

**3.0 Construction Requirements.** All work shall conform to the requirements of Sec 617.

**4.0 Method of Measurement.** Measurement for Concrete Traffic Barrier, Type C, Transition shall be at the contract unit price of feet.

**5.0 Basis of Payment.** This work will be paid for at the contract unit price of feet.

Item No.	Unit	Description
607-99.03	LF	Misc. Concrete Traffic Barrier, Type C, Transition.

CC. Misc. Light Pole Repairs

**1.0 Description.** Misc. Light Pole Repairs shall be in accordance with the project plans and section 901.

**2.0 Construction Requirements.** Light Pole Repairs are described in the project plans and shall conform to section 901.

**2.0 Method of Measurement.** Final measurement will be considered for Light Pole Repairs per each light pole to receive repairs.

**4.0 Basis of Payment.** All work required for the listed repairs shall be completely covered by the contract unit price for Misc. Light Pole Repairs.

Item No.	Unit	Description
901-99.02	EA	Misc. Light Pole Repairs

DD. Misc. Light Pole Replacement

**1.0 Description.** Misc. Light Pole Replacement shall be in accordance with the project plans and section 901.

**2.0 Construction Requirements.** Misc. Light Pole Replacement construction requirements are described in the project plans and shall conform to section 901.

**3.0 Method of Measurement.** Final measurement will be considered for Light Pole Replacement per each light pole to require pole and fixture replacement.

**4.0 Basis of Payment.** All work required for the light pole replacement and fixture replacement shall be completely covered by the contract unit price for Misc. Light Pole Replacement.

Item No.	Unit	Description
901-99.02	EA	Misc. Light Pole Replacement

EE. Misc. Navigation Light Repair

**1.0 Description.** Misc. Navigation Light Repair shall be in accordance with the project plans and section 901.

**2.0 Construction Requirements.** Misc. Navigation Light Repair construction requirements are described in the project plans and shall conform to section 901.



**4.0 Method of Measurement.** Final measurement will be considered for Navigation Light Repair per each navigation light requiring modification noted in the plans.

**4.0 Basis of Payment.** All work required for navigation light repair shall be completely covered by the contract unit price for Misc. Navigation Light Repair

Item No.	Unit	Description
901-99.02	EA	Misc. Navigation Light Repair