STATE OF MISSOURI HIGHWAYS and TRANSPORTATION COMMISSION

JEFFERSON CITY, MISSOURI

CONSTRUCTING OR IMPROVING Contract I.D. 181019-G03

THIS JOB SHALL BE CONSTRUCTED UNDER FEDERAL PROJECT NUMBER(S): FAS S601(46), FAS S601(75)

Job J7S3141 Route F, Z GREENE County. Job J8S3083 Route Z GREENE County.

BIDDER CHECKLIST FINAL CHECKLIST BEFORE SUBMITTING BID

- 1. Submit completed Contractor Questionnaire and/or Contractor Prequalification Questionnaire with attachments not later than seven (7) days prior to the date and hour of the bid opening. See Secs 101-103 of the Missouri Standard Specifications for Highway Construction, and Rule 7 CSR 10-15.010, "Prequalifications to Bid of Certain Contractors". Questionnaire and Contact information are provided on MoDOT's website.
- 2. All bids shall be submitted electronically using "Bid Express Secure Internet Bidding" at www.bidx.com. Any paper bid submitted will be considered irregular per section 102.8 of the Missouri Standard Specifications for Highway Construction.
- 3. Please read all items in the bidding document carefully. The EBSX files from MoDOT's website may be used for the itemized bid.
- 4. If submitted in the name of a firm or corporation, the legal name of the firm or corporation should appear in the space designated, and be signed for by one or more persons legally qualified to execute papers in the name of said firm or corporation.
- 5. The bidder shall submit a Bid Guaranty meeting the requirements of Sec 102 of the Missouri Standard Specifications for Highway Construction. If submitting a project specific or annual bid bond, bidders must use the MoDOT provided bid bond forms. The project specific bond form is included in the request for bid. The project specific and annual bid bond forms are also available on MoDOT's website. Annual bid bonds shall be executed by June 15th of each year.
- 6. Submit the Subcontractor Disclosure Form in accordance with the bidding documents. For bids of more than \$2,000,000, each bidder shall submit with each bid a disclosure of the subcontracts that have a subcontract value that is equal or greater than twenty percent of the total project bid or subcontracts that are greater than or equal to \$2,000,000. If that information is not available at the time of bid the bidder shall submit the "Subcontractor Disclosure Form" pages with MoDOT on or before 4:00 p.m. of the third business day after the bid opening date.
- 7. Submit the DBE Identification Submittal in accordance with the bidding documents for Federal Projects Only.
- 8. Alternate Pavements; to exercise this option, separate pay items, descriptions and quantities are included in the itemized proposal for each of the two alternates. The bidder shall bid only one of the two alternates and leave the contract unit price column blank for any pay item listed for the other alternate.
- 9. When submitting a bid, your bid will still come through with "red" folders. You should make sure that it is not the Schedule of Items folder or the Signature and Identity of Bidder folder. Click on the yellow checkmark (Check

Bid)at the top and it will list any errors in the bid. To view itemized folders, click the Tree View. This will show the status of the individual folders.

Below is a list of common mistakes made by bidders leading to nonresponsive bids. Please refer to the Standard Specifications for the appropriate procedures for completing and submitting a bid.

- a) Submitting a paper bid for a project
- b) Using a different bid bond form than the one provided
- c) Improper use of the Maximum Monetary Value Award Provision

 only used if bidding more than one project and should be
 in only one bid proposal

All questions concerning the bid document preparation shall be directed to the Central Office - Design Division at (573) 751-2876. Project specific questions shall be directed to the project contact listed in the Job Special Provisions.

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^{*}These forms are also available on MoDOT's Website, www.modot.org under Information on the Bid Opening Info page of the Contractor Resources site.

NOTICE TO CONTRACTORS

Electronic bids submitted through the Bid Express website for the proposed work will be received by the Missouri Highways and Transportation Commission until 11:00 o'clock a.m. (prevailing local time) on 10/19/2018.

Bid bonds will be received at the office of the Secretary to the Commission in the Missouri Department of Transportation Central Office Building, 105 West Capitol Avenue, Jefferson City, Missouri; delivered by US Mail should be mailed to: Missouri Highways and Transportation Commission, Attention: State Design Engineer/Bid Bond, P.O. Box 270, Jefferson City, MO 65102 or delivered by parcel delivery services, (such as UPS, Fed Ex, DHL, etc.) should be shipped to Missouri Highways and Transportation Commission, Attention: State Design Engineer/Bid Bond, 105 West Capitol Avenue, Jefferson City, MO 65102.

(1) PROPOSED WORK: The proposed work, hereinafter called the work, includes:

****(1): Job J7S3141 Route F, Z GREENE County. Resurface on Route F from Route 160 to Route 266 near Ash Grove and on Route Z from beginning to Farm Road 60 in Willard, the total length of improvement being 15.357 miles.****(2): Job J8S3083 Route Z GREENE County. Resurface from Farm Road 60 to Route 160 in Willard, the total length of improvement being 2.529 miles.

If more than one Job Number is listed for this call, then combination bids will be required on the Jobs listed above.

- (2) COMPLIANCE WITH CONTRACT PROVISIONS: The bidder, having examined and being familiar with the local conditions affecting the work, and with the contract, contract documents, including the Missouri Highways and Transportation Commission's "Missouri Standard Specifications for Highway Construction, 2018," and "Missouri Standard Plans for Highway Construction, 2018", their revisions, and the request for bid, including appendices, the special provisions and plans, hereby proposes to furnish all labor, materials, equipment, services, etc., required for the performance and completion of the work. All references are to the Missouri Standard Specifications for Highway Construction, as revised, unless otherwise noted. All questions concerning the bid document preparation shall be directed to the Central Office Design Division at (573) 751-2876.
- (3) PERIOD OF PERFORMANCE: If the bid is accepted, the bidder shall continuously and diligently prosecute the work in such order and manner as will ensure the completion of the work within the time specified in the Job Special Provisions in accordance with Sec 108.
- (4) LIQUIDATED DAMAGES: The bidder agrees that, should the bidder fail to complete the work in the time specified or such additional time as may be allowed by the engineer under the contract, the amount of liquidated damages as specified in the Job Special Provisions to be recovered in accordance with Sec 108.
- (5) ITEMIZED BID: The bidder should complete the following section in

accordance with Sec 102.7. The bidder proposes to furnish all labor, materials, equipment, services, etc. required for the performance and completion of the work, as follows:

Line N	umber	Item Number	Quantity	Unit	Unit Price Extension Price
	n 0001				
	dway Items				
0010		2022010	1	LS	
	REMOVAL OF	F IMPROVEMENTS			
0020		2153000	8.000	100F	
	SHAPING SI	LOPES, CLASS III			
0030		3049910	924.800	TONS	
	MISC. PERM	M. AGGREGATE EDGE TRI			
0040		3105002	324.000	TONS	
	GRAVEL (A)) OR CRUSHED STONE (I			
0050		4011211	4219.400		
	BITUMINOUS	S PAVEMENT MIXTURE PO	364-22, (BP-2)		
0060			8549.500		
	BITUMINOUS	S PAVEMENT MIXTURE PO		LEVELING)	
0070		4071005	19952.000		
	TACK COAT				
0800		6123000A	2.000		
	TRUCK OR 7	TRAILER MOUNTED ATTEN	NUATOR (TMA)		
0090		6161005	2818.000		
	CONSTRUCT				
0100		6161008	3.000		
	ADVANCED V	WARNING RAIL SYSTEM			
0110		6161009	3.000		
	FLAG ASSE				
0120		6161025	200.000		
	CHANNELIZI	ER (TRIM LINE)			
0130		6161099	3.000		
	CHANGEABLI	E MESSAGE SIGN WITH (COMMUNICATION IN	TERFACE, CO	NTRACTOR FURNISHED, CONTRACTOR RETAINED
0140		6162004	6.000	EA	
		SHORT-TERM RUMBLE ST	TRIPS		
0150		6181000	1		
	MOBILIZAT		_		
0160		6200015	68.000		
0100	PREFORMED	THERMOPLASTIC PAVEM			
0170		6200033	2.000		
0170		THERMOPLASTIC PAVEMI			ARKER
0180		6206000C	162265.000		
3100		TE STANDARD WATERBORI			TYPE P BEADS
0190		6206001C	126609.000		
U 1 7 U		6206001C LOW STANDARD WATERBOI			TYPE P BEADS
		6209903			
0200	MISC DDF	6209903 FORMED REMOVABLE TEMI	150.000 ORARY 6" WHITE		F.
0010					
0210		6221001	6435.000 T FOR REMOVAL O	_	(3 TN THICK OF IFCC)
					(3 IN. THICK OR LESS)
0220	MODIETED (6224010	1056.000	SQYD	
	MODILIED (COLDMILLING (DEPTH TE			
0230	CONTRACTOR	6274000		LS	
	CONTRACTOR	R FURNISHED SURVEYING	AND STAKING		

	n 0002 rdrail/Guard Cable - J7S3141
0240	6061061 250.000 LF MGS GUARDRAIL, 8 FT. POSTS, 6 FT 3 IN. SPACING
0250	6061069 4.000 EA MGS BRIDGE APPROACH TRANSITION SECTION (REGULAR/NO CURB)
0260	6063014 4.000 EA TYPE A CRASHWORTHY END TERMINAL (MASH)
Section	n 0002 Total
	n 0003 dge K06461 Items - J7S3141
0270	7039902 4.000 EA MISC. END POST MODIFICATION
Section	n 0003 Total
	n 0004 dway Items - J8S3083
0280	2022010 1 LS REMOVAL OF IMPROVEMENTS
0290	3049910 170.800 TONS MISC. PERMANENT AGGREGATE EDGE TREATMENT
0300	3105002 108.000 TONS GRAVEL (A) OR CRUSHED STONE (B)
0310	4011211 2413.500 TONS BITUMINOUS PAVEMENT MIXTURE PG64-22, (BP-2)
0320	4071005 3293.000 GAL TACK COAT
0330	6123000A 2.000 EA TRUCK OR TRAILER MOUNTED ATTENUATOR (TMA)
0340	6161005 1109.000 SQFT CONSTRUCTION SIGNS
0350	6161008 1.000 EA ADVANCED WARNING RAIL SYSTEM
0360	6161009 1.000 EA FLAG ASSEMBLY
0370	6161025 100.000 EA CHANNELIZER (TRIM LINE)
0380	6161099 1.000 EA CHANGEABLE MESSAGE SIGN WITH COMMUNICATION INTERFACE, CONTRACTOR FURNISHED, CONTRACTOR RETAINED
0390	6162004 6.000 EA TEMPORARY SHORT-TERM RUMBLE STRIPS
0400	6181000 1 LS MOBILIZATION
0410	6200009 90.000 LF

PREFORMED THERMOPLASTIC PAVEMENT MARKING, 6 IN. WHITE

	1411335	•	nt of transportation	Contract 15: 101013 G03
0420	6200015	22.000	LF	
	PREFORMED THERMOPLASTIC PAVEMENT MA	ARKING, 24	IN. WHITE	
0430	6206000C	27251.000		
	4 IN. WHITE STANDARD WATERBORNE PAY	VEMENT MARK	ING PAINT, TYPE P BEADS	
0440	6206001C		LF	
	4 IN. YELLOW STANDARD WATERBORNE PA			
0450	6207001	60.000		
0150	PAVEMENT MARKING REMOVAL	00.000		
0460		234 000	T.F.	
3400	MISC. PREFORMED REMOVABLE TEMPORARY			
0470	6221001			
0470	COLDMILLING BITUMINOUS PAVEMENT FOR			99)
0480	6224010 MODIFIED COLDMILLING (DEPTH TRANSIT			
0490		1	LS	
	CONTRACTOR FURNISHED SURVEYING AND			
Section	on 0004 Total			
	on 0005			
	gning Items - J8S3083			
0500	9031010	0.900	CUYD	
	CONCRETE FOOTINGS, EMBEDDED			
0510	9031241	10.000	EA	
0010	BREAKAWAY ASSEMBLY (PERFORATED SQUA		UBE)	
0520	9031242	3.000	 ΕΔ	
0320	36 IN. SURFACE-MOUNT DELINEATOR POS		EA	
0.520			T 17	
0530	9031270A 2 IN. PSST POST - 12 GA.	48.000	LF	
0540		9.000	LF	
	POST ANCHOR FOR 2 IN. PSST - 7 GA.			
0550	9031280	112.000	LF	
	2.5 IN. PSST POST - 12 GA.			
0560	9031281	21.000	LF	
	POST ANCHOR FOR 2.5 IN. PSST - 7 GA	Α.		
0570	9035004A	91.000		
	SH-FLAT SHEET			
0580		102.000	SQFT	
	SHF-FLAT SHEET FLUORESCENT			
Sectio	on 0005 Total			
Item 7	Total			\$0.00

DBE CERTIFICATION

- (6) Trainees: (Applies to Federal Projects only) The number of trainee hours provided under this contract will be 0 slots at 1000 hours per slot or 0 hours.
- (7) Bidder's Certification for DBE Program and Contract Goal

(Applies to Federal Projects only.)

- (A) DBE Contract Goal: By submitting this bid, the bidder certifies that the bidder is familiar with the DBE Program Requirements in the General Provisions. The contract goal for the amount of work to be awarded is 8.00 % of the total federal project price. The bidder shall also complete the DBE Identification Submittal form in accordance with the General Provisions. This form is available on MoDOT's Website, www.modot.org on the Bid Opening Info page of the Contractor Resources site.
- (B) DBE Participation: The bidder certifies that it will utilize DBE's as follows:
 - % OF TOTAL FEDERAL CONTRACT

NOTE: Bidder must fill in the above blank. If no percentage is specified, the bidder certifies that it agrees to and will comply with the contract goal. If a percentage below the contract goal is specified, then the bidder must submit complete documentation of good faith efforts to meet the DBE contract goal, immediately below.

The DBE Identification Submittal form will be submitted via

(C) Certification of Good Faith Efforts to Obtain DBE Participation: By submitting its signed bid, the bidder certifies under penalty of perjury and other provisions of law, that the bidder took each of the following steps to try to obtain sufficient DBE participation to achieve the Commission's proposed DBE Contract Goal:

CONTRACT PROVISIONS

(8a) ACCEPTANCE OF PROVISION FOR PRICE ADJUSTMENT FOR FUEL: Bidders have the option to accept the provision for Price Adjustment for Fuel in accordance with Sec. 109.14. The bidder must select "Yes" for those items of work in which they choose to accept the provision. No price adjustments will be made, due to fuel price changes, for bidders who do not accept this provision. This provision does not apply to Seal Coat.

EXCAVATION PRODUCTION

ASPHALT PAVING PRODUCTION AND HAULING

CONCRETE PAVING PRODUCTION AND HAULING

AGGREGATE BASE HAULING

(8b) ACCEPTANCE FOR PROVISION FOR ASPHALT CEMENT PRICE INDEX, SEAL COAT PRICE INDEX, ASPHALT UNDERSEAL PRICE INDEX, OR POLYMER MODIFIED EMULSION MEMBRANE PRICE INDEX: Bidders have the option to accept the provision for Asphalt Cement Price Index, Seal Coat Price Index, Asphalt Underseal Price Index, and/or Polymer Modified Emulsion Membrane Price Index (when used in conjunction with an Ultrathin Bonded Asphalt Wearing Surface treatment) in accordance with the General Provisions. The bidder must mark each box below if they choose to accept the provision. No price adjustments will be made, due to asphalt price changes, for bidders who do not accept this provision.

ASPHALT CEMENT

SEAL COAT

ASPHALT UNDERSEAL

POLYMER MODIFIED EMULSION MEMBRANE (UBAWS)

(9) MAXIMUM MONETARY VALUE OF AWARDS ACCEPTED THIS BID OPENING: Bidders have the option to specify the maximum monetary value of awards that they will accept for the total of all bids they have submitted in the bid opening, Sec 102.7.2. If the bidder is submitting only one bid, or if the bidder does not want to specify a maximum monetary value for submitted bids, this section should not be completed. If a submitted bid upon correction exceeds the indicated maximum monetary amount, the bid may be declared non-responsive. If a bidder's submitted bids show different values for the maximum monetary value, the lowest value will govern.

MAXIMUM MONETARY VALUE OF AWARDS ACCEPTED THIS BID OPENING

(Note: this amount should be entered in only one of the bids for this bid opening)

(10) COMBINATION BIDS: (Applies only if combination bids are specified. See cover and/or notice to contractor(s).) Combination bids will be in accordance with Sec 102.12. By selecting "All or None" the bidder desires to combine all projects in accordance with Sec 102.12.2.1.

(11a) CERTIFICATIONS FOR FEDERAL JOBS: (Applies to Federal Projects only.) By signing and submitting this bid, the bidder makes the certifications appearing in Sec. 102.18.1(regarding affirmative action and equal opportunity), Sec. 102.18.2 (regarding disbarment, eligibility, indictments, convictions, or civil judgments), Sec. 102.18.3 (regarding anti-collusion), and Sec. 102.18.4 (regarding lobbying activities). Any necessary documentation is to accompany the bid submission, as required by these sections. As provided in Sec. 108.13, the Commission may terminate the contract for acts of misconduct, which fraud, limited includes but is not to dishonesty and misrepresentation or omission of fact within the bid submission.

(11b) CERTIFICATIONS FOR STATE JOBS: (Applies to State Projects only.) By signing and submitting this bid, the bidder makes the certifications appearing in Sec. 102.18.2 (regarding diseligibility, indictments, convictions, or civil judgments), Sec. 102.18.3 (regarding anti-collusion), and Sec. 102.18.5 (regarding Missouri Domestic Products Procurement Act).

Any necessary documentation is to accompany the bid submission, as required by these sections. As provided in Sec. 108.13, the Commission may terminate the contract for acts of misconduct, which includes but is not limited to fraud, dishonesty, and material misrepresentation or omission of fact within the bid submission.

Does the bidder make certification for the above items listed in 11(a) or 11(b)? Yes \bigcirc No \bigcirc

By selecting "No" the bidder REFUSES to make one or more certifications for the above items 11a or 11b. The bidder shall provide a statement of explanation for the refusal in the space below or by fax to the Design Division @ Fax no. 573-522-2281.

(12) ANTIDISCRIMINATION: The Commission hereby notifies all bidders that it will affirmatively ensure that in any contract entered into pursuant to this advertisement, businesses owned and controlled by socially and economically disadvantaged individuals will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, religion, creed, sex, age, ancestry, or national

origin in consideration for an award.

(13) PREFERENCE TO MISSOURI FIRMS IN AWARDING OF CONTRACTS: (Applies to State Projects only.) The bidder's attention is directed to Section 34.355 RSMo Supp 2000, et seq, which requires that preference be given in awarding contracts to firms, corporations, or individuals doing business as Missouri firms, corporations, or individuals, or which maintain Missouri offices or places of business, when the quality of performance promised is equal, or better, and the price quoted is the same, or less.

The law also requires that a contractor or bidder domiciled outside the State of Missouri shall be required, in order to be the successful bidder, to submit a bid which is the same percent less than the lowest bid submitted by a responsible contractor or bidder domiciled in Missouri as would be required for the Missouri domiciled contractor or bidder to succeed over the bidding contractor or bidder domiciled outside Missouri in a like contract or bid being let in his domiciliary state. A contractor or bidder domiciled outside Missouri shall also be required to submit an audited financial statement as would be required of a Missouri domiciled contractor or bidder on a like contract or bid being let in the domiciliary state of that contractor or bidder.

For firms, corporations or individuals domiciled outside the State of Missouri, it is requested they submit the following information:

List the state of domicile

List address of all Missouri offices or places of business

I acknowledge that I have read, understand and completed the above Contract Provisions.

SUBCONTRACTOR DISCLOSURE

(14) SUBCONTRACTOR DISCLOSURE The bidder shall submit with this bid any subcontracts that meet the requirements of Sec 102. List below the name of each subcontractor that will be furnishing labor, labor and materials, the category of work that the subcontractor will be performing (e.g. asphalt, concrete, earthwork, bridges...), and the dollar value of the subcontract. Select "NONE" if there are no subcontractors that need to be disclosed.

If the information is not available at the time of bid, the bidder shall submit the "Subcontractor Disclosure Form", located on MoDOT's website, on or before 4:00 p.m. of the third business day after the bid opening date, directly to the Design Division, Missouri Department of Transportation, 105 W. Capitol Avenue, P.O. Box 270, Jefferson City, Missouri 65102-0270. Telefax transmittal to MoDOT will be permitted at fax no. 573-522-2281 or emailed to subcontractor.disclosure@modot.mo.gov. The complete signed original documents do not need to be mailed to MoDOT, but the bidder shall have it available if requested by the Design Division or the engineer.

requested by the Design Division or the engineer. SUBCONTRACTOR NAME: DOLLAR VALUE: \$ CATEGORY OF WORK: SUBCONTRACTOR NAME: DOLLAR VALUE: \$ CATEGORY OF WORK: SUBCONTRACTOR NAME: DOLLAR VALUE: \$ CATEGORY OF WORK: SUBCONTRACTOR NAME: DOLLAR VALUE: \$

SUBCONTRACTOR NAME:

CATEGORY OF WORK:

Contract ID: 181019-G03

Submitted:

SIGNATURE AND IDENTITY OF BIDDER

(15) SIGNATURE AND IDENTITY OF BIDDER

BY SUBMITTING THIS BID ELECTRONICALLY, I HEREBY ACKNOWLEDGE THAT ALL REQUIREMENTS INCLUDED IN THE HARD COPY REQUEST FOR BID, AND AMENDMENTS ARE A PART OF THIS BID AND CONTRACT.

*** AN ELECTRONIC PROPOSAL SUBMITTED AND SIGNED WITH A DIGITAL ID, UNDER THE PROVISION OF THE MISSOURI DEPARTMENT OF TRANSPORTATION, WILL BE CONSIDERED VALID AND BINDING. ***

THE BIDDER CERTIFIES THAT THE BIDDER AND ITS OFFICIALS, AGENTS, AND EMPLOYEES HAVE NEITHER DIRECTLY NOR INDIRECTLY ENTERED INTO ANY AGREEMENT, PARTICIPATED IN ANY COLLUSION, OR OTHERWISE TAKEN ANY ACTION IN RESTRAINT OF FREE COMPETITIVE BIDDING IN CONNECTION WITH THIS BID, AND THAT THE BIDDER INTENDS TO PERFORM THE WORK WITH ITS OWN BONAFIDE EMPLOYEES AND SUBCONTRACTORS, AND DID NOT BID FOR THE BENEFIT OF ANOTHER CONTRACTOR.

THE BIDDER CERTIFIES THAT THE BIDDER'S COMPANY KNOWINGLY EMPLOYS ONLY INDIVIDUALS WHO ARE AUTHORIZED TO WORK IN THE UNITED STATES IN ACCORDANCE WITH APPLICABLE FEDERAL AND STATE LAWS AND ALL PROVISIONS OF MISSOURI EXECUTIVE ORDER NO. 07-13 FOR CONTRACTS WITH THE MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION, ACTING THROUGH THE MISSOURI DEPARTMENT OF TRANSPORTATION.

THE BIDDER ACKNOWLEDGES THAT THIS IS AN UNSWORN DECLARATION, EXECUTED UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE UNITED STATES AND/OR FALSE DECLARATION UNDER THE LAWS OF MISSOURI, AND ANY OTHER APPLICABLE STATE OR FEDERAL LAWS. THE FAILURE TO PROVIDE THIS CERTIFICATION IN THIS BID MAY MAKE THIS BID NON-RESPONSIVE, AND CAUSE IT TO BE REJECTED.

Yes No

Select "No" ONLY if the bidder REFUSES to make this certification. The bidder may provide an explanation for the refusal with this submittal in the space below or by fax to the Design Division @ fax no. 573-522-2281.

USE OF ANOTHER PERSON'S DIGITAL ID IN THIS BIDDING PROCESS VIOLATES THE LAWS OF MISSOURI.

I acknowledge that I have read, understood and completed the above Electronic Bid Submission Certification.

Contract ID: 181019-G03

BID BOND

(16) BID GUARANTY: The bidder shall submit a Bid Guaranty meeting the requirements of Section 102 of the Missouri Standard Specifications for Highway Construction. MoDOT's bid bond forms are available on MoDOT's website.

Annual bid bonds shall be submitted to MoDOT by June 15th of each year. If utilizing a paper annual or project specific bid bond as a Bid Guaranty

for this project the bidder shall mark the box below.

**Pay by: Paper Annual or Project Specific Bid Bond.

If submitting a cashier's/certified check, the Bid Bond folder will not turn green.

ELECTRONIC BID BOND

The bidder shall complete the following bond verification process if utilizing an electronic project bid bond or electronic annual bid bond as a Bid Guaranty for this project.

**Bond ID: Verify Clear

**Surety Registry Agency:

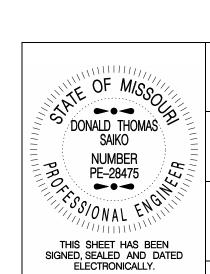
**Bond Pct:

Surety State:

FIELDS WITH THE ** INDICATOR ARE REQUIRED FIELDS IF SUBMITTING YOUR BID VIA BID EXPRESS

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MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 W. CAPITOL AVE. JEFFERSON CITY, MO 65102 Phone 1-888-275-6636

If a seal is present on this sheet, JSP's have been electronically sealed and dated.

JOB NUMBER: COUNTY, MO DATE PREPARED:

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-09-02D

- **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 under "Bidding". 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 under "Business"; "Standards and Specifications". The effective version shall be determined by the letting date of the project.

General Provisions & Supplemental Specifications

Supplemental Plans to July 2018 Missouri Standard Plans For Highway Construction

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

B. <u>Contract Liquidated Damages</u> JSP-13-01B

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

Notice to Proceed: December 3, 2018 Completion Date: December 1, 2019

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
J7S3141	87	\$1,800
J8S3083	20	\$1,800

- **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 \$500 per calendar day for each calendar day, or partial day thereof, that the work is not fully completed. For projects in combination, these damages will be charged in full for failure to complete one or more projects within the above specified completion date or calendar days.
- **4.0 Liquidated Damages for Road User Costs.** Should the contractor fail to complete the work on or before the completion date specified in Section 2.0, or within the number of calendar days specified in Section 2.1, whichever occurs first, the contractor will be charged road user costs in accordance with Sec 108.8 in the amount specified in Section 2.1 for each calendar day, or partial day thereof, that the work is not fully completed. These damages are in addition to the contract administrative damages and any other damages as specified elsewhere in this contract.
- C. Work Zone Traffic Management JSP-02-06F
- **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 Conflict Resolution.** Any conflict resolution shall be in accordance with Sec 616.4. Failure to make corrections on time may result in the engineer suspending work. The suspension will be non-excusable and non-compensable regardless if road user costs are being charged for closures.

2.0 Traffic Management Schedule.

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

- **2.2** The traffic management schedule shall conform to the limitations specified in Sec 616 regarding lane closures, traffic shifts, road closures and other width, height and weight restrictions.
- **2.3** The engineer shall be notified as soon as practical of any postponement due to weather, material or other circumstances.
- **2.4** In order to ensure minimal traffic interference, the contractor shall schedule lane closures for the absolute minimum amount of time required to complete the work. Lanes shall not be closed until material is available for continuous construction and the contractor is prepared to diligently pursue the work until the closed lane is opened to traffic.
- 2.5 Traffic Congestion. The contractor shall, upon approval of the engineer, take proactive measures to reduce traffic congestion in the work zone. The contractor shall immediately implement appropriate mitigation strategies whenever traffic congestion reaches an excess of 10 minutes to prevent congestion from escalating to 15 minute or above threshold. If disruption of the traffic flow occurs and traffic is backed up in queues of 15 minute delays or longer, then the contractor shall immediately review the construction operations which contributed directly to disruption of the traffic flow and make adjustments to the operations to prevent the queues from reoccurring. Traffic delays may be monitored by physical presence on site or by utilizing real-time travel data through the work zone that generate text and/or email notifications where available. The engineer monitoring the work zone may also notify the contractor of delays that require prompt mitigation. The contractor may work with the engineer to determine what other alternative solutions or time periods would be acceptable.

2.5.1 Traffic Safety.

- **2.5.1.1** 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** When a traffic queue extends 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 due to non-recurring congestion, 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 There are six major holiday periods shown below. All lanes shall be scheduled to be open to traffic during these holiday periods, from 12:00 noon on the last working day proceeding the

holiday period until 9:00 a.m. on the first working day subsequent to the holiday period unless approved by the Engineer.

Memorial Day Independence Day and Friday, July 5, 2019 Labor Day Thanksgiving Christmas New Year's Day

- **3.2** The contractor shall not perform any construction operation on the roadway during restricted periods, holiday periods or other special events specified in the contract documents.
- **3.3** Any work requiring a reduction in the number of through lanes of traffic shall be completed during nighttime hours.

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 the police or other emergency agencies for incident management. In case of traffic accidents or the need for police to direct or restore traffic flow through the job site, the contractor shall notify police or other emergency agencies immediately as needed. The Resident Engineer's office shall also be notified when the contractor requests emergency assistance.

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

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

Missouri Highway Patrol Troop D : 417-895-6868
Greene County Sheriff Department: 417-868-4040
City of Ash Grove Police Department: 417-751-2333
City of Ash Grove Fire Department: 417-751-3300
City of Willard Police Department: 417-742-3077
City of Willard Fire Department: 417-685-3114
MoDOT Incident Response 417-864-1160
Emergency Only Numbers
(*55 cell phone – Missouri Highway Patrol)

- **2.1** This list is not all inclusive. Notification of the need for wrecker or tow truck services will remain the responsibility of the appropriate police agency.
- **2.2** The contractor shall notify 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 enforcement and emergency agencies, a report shall be furnished to the engineer on the status of incident management.
- **3.0** No direct pay will be made to the contractor to recover the cost of the communication equipment, labor, materials or time required to fulfill the above provisions.

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

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

Don Saiko, P.E., Project Contact Southwest District 3025 E. Kearney Street Springfield, MO 65803 Telephone Number: 417-895-7692

E-mail: Donald.Saiko@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-18-01D

Delete Sec 106.9 and substitute the following:

106.9 Buy America Requirement On all federal-aid projects, the contractor's attention is directed to Title 23 CFR 635.410 Buy America Requirements. Where steel or iron products are

to be permanently incorporated into the contract work, steel and iron material shall be manufactured in the USA except for "minor usage" as described herein. Furthermore, any coating process of the steel or iron shall be performed in the USA. The use of pig iron and processed, pelletized and reduced iron ore manufactured outside of the USA will be permitted in the domestic manufacturing process for steel or iron material.

Delete Sec 106.9.3 and substitute the following:

- **106.9.3** Buy America requirements include a step certification for all fabrication processes of all steel or iron materials that are accepted per Sec 1000.
- **106.9.3.1** Items designated as Category 1 will consist of steel girders, piling, and reinforcing steel installed on site. Category 1 items require supporting documentation prior to incorporation into the project showing all steps of manufacturing, including coating, as being completed in the United States and in accordance with CFR Title 23 Section 635.410 Buy America Requirements. This includes the Mill Test Report from the original producing steel mill and certifications documenting the manufacturing process for all subsequent fabrication, including coatings. The certification shall include language that certifies the following. That all steel and iron materials permanently incorporated in this project was procured and processed domestically and all manufacturing processes, including coating, as being completed in the United States and in accordance with CFR Title 23 Section 635.410.
- 106.9.3.2 Items designated as Category 2 will include all other steel or iron products not in Category 1 and permanently incorporated in the project. Category 2 items shall consist of, but not be limited to items such as fencing, guardrail, signing, lighting and signal supports. The prime contractor is required to submit a material of origin form certification prior to incorporation into the project from the fabricator for each item that the product is domestic. The Certificate of Materials Origin form (link to certificate form) from the fabricator must show all steps of manufacturing, including coating, as being completed in the United States and in accordance with CFR Title 23 Section 635.410 Buy America Requirements and be signed by a fabricator representative. The Engineer reserves the right to request additional information and documentation to verify that all Buy America requirements have been satisfied. These documents shall be submitted upon request by the Engineer and retained for a period of 3 years after the last reimbursement of the material.
- **106.9.3.3** Any minor miscellaneous steel or iron items that are not included in the materials specifications shall be certified by the prime contractor as being procured domestically. Examples of these items would be bolts for sign posts, anchorage inserts, etc. The certification shall read "I certify that all steel and iron materials permanently incorporated in this project during all manufacturing processes, including coating, as being completed in the United States and in accordance with CFR Title 23 Section 635.410 Buy America Requirements procured and processed domestically in accordance with CFR Title 23 Section 635.410 Buy America Requirements. Any foreign steel used was submitted and accepted under minor usage". The certification shall be signed by an authorized representative of the prime contractor.

Delete Sec 106.9.4 and Renumber subsequent sections accordingly:

Delete Sec 616.5.1 and substitute the following:

616.5.1 Amber or Amber and White Warning Lights. All on-road construction-related vehicles and equipment shall operate with amber or amber and white warning lights having 360 degrees of total coverage and as follows:

- (1) For daytime operations, SAE Class 1 or 2 lights shall be used.
- (2) For dusk to dawn operations, SAE Class 2 lights shall be used, or SAE Class 1 lights with dimming capabilities to minimize glare experienced by travelers.
- **616.5.1.1 Red or Red and Blue Warning Lights.** The contractor may elect to use red or red and blue warning lights in accordance with Missouri law and the following requirements:
 - (1) Use of red or red and blue lights shall be limited to use on a total of two vehicles per work zone and/or project.
 - (2) Use of red or red and blue warning lights shall be limited to areas in advance of tapers or lane shifts and at the active work location.
 - (3) Lights shall be SAE Class 2 or SAE Class 1 with dimming capabilities to minimize glare experienced by travelers.

The awarded contract will serve as a permit by the Commission, granting the prime contractor and approved sub-contractors to utilize red or red and blue lights as required by Missouri law.

G. Special Provisions for Protection of BNSF Railway Company Interests

To Report an Emergency on the railroad call: (800) 832-5452 BNSF Ft. Scott Subdivision, Greene County, DOT# 669 802B (MP 183.5) in Ash Grove, MO.

1.0 Authority of Railroad Engineer and Commission's Representative.

- **1.1** The authorized representative of BNSF Railway Company, herein called "Railroad Engineer", shall have final authority in all matters affecting the safe maintenance and operation of railroad traffic including the adequacy of the foundations and structures supporting the railroad tracks.
- **1.2** The authorized representative of the Missouri Highways and Transportation Commission, herein called "Engineer", shall have authority over all other matters as prescribed herein and in the project specifications.

2.0 Contractor's indemnity Obligations to the Railroad.

2.1 The term "contractor" as used in this special provision includes any and all subcontractors. The contractor shall indemnify, defend and hold harmless the Railroad from and against any and all loss, damage, claims, demands, causes of action, costs and expenses of whatsoever nature arising out of injury to or death of persons whomsoever, or out of damage to or destruction of property whatsoever, including, without limitation, damage to fiber optic, communication and other cable lines and systems, where such injury, death, damage or destruction results from any cause arising out of work performed by the contractor pursuant to the agreement between Railroad and the Commission for the project, and shall also release the

Railroad from and shall waive any claims for injury or damage to equipment or other property, which may result from the construction, maintenance and operation of railroad tracks, wire lines, fiber optic cable, pipe lines and other facilities on said right of way of the Railroad by the contractor. THE LIABILITY ASSUMED BY THE CONTRACTOR WILL NOT BE AFFECTED BY THE FACT, IF IT IS A FACT, THAT THE DAMAGE, DESTRUCTION, INJURY, DEATH, CAUSE OF ACTION OR CLAIM WAS OCCASIONED BY OR CONTRIBUTED TO BY THE NEGLIGENCE OF THE RAILROAD, THE RAILROAD'S AGENTS, SERVANTS, EMPLOYEES OR OTHERWISE, EXCEPT TO THE EXTENT THAT SUCH CLAIMS ARE PROVEN BY ANY CLAIMANT TO HAVE BEEN PROXIMATELY CAUSED BY THE INTENTIONAL MISCONDUCT OR SOLE OR GROSS NEGLIGENCE OF THE RAILROAD. The contractor's indemnity shall include loss of profits or revenue arising from damage or destruction to fiber optic, communication and other cable lines and systems.

- **2.2** In addition to the indemnity obligations contained in the preceding paragraph, the contractor shall indemnify, defend and hold harmless the Railroad from any claims, expenses, costs, actions, demands, losses, fines, penalties, and fees, of whatsoever nature arising from, related to or connected, in whole or in part, with the following:
 - (a) The removal of the contractor's agents, servants, employees or invitees from the Railroad's property for safety reasons.
 - (b) Contractor's compliance or failure to comply with the provision of applicable law in connection with the performance of contractor's work.

3.0 Notice of Starting Work.

- **3.1** The contractor shall not commence any work on Railroad's right of way until the contractor has complied with the following conditions:
 - (a) At least 30 days in advance of the date the contractor proposes to begin work on Railroad's right of way, the contractor shall give the Railroad written notice to the address below with copy to the Engineer who has been designated to be in charge of the work.

Mr. John Caufield, P.E. Manager of Public Projects BNSF Railway 4515 Kansas Ave. Building 4B, 3rd Floor Kansas City, KS 66106

- (b) Obtain written or electronic authorization from the Railroad to begin work on the Railroad's right of way, such authorization to include an outline of specific conditions with which contractor shall comply.
- (c) Obtain the insurance coverage required in Section 13.0 of this job special provision. Contractor shall submit written evidence of such coverage to Railroad prior to commencing any work.
- (d) Prior to performing any work on Railroad's property, right –of way or in an area that may impact Railroad's operations, the contractor's employees, representatives or agents who are regularly assigned to perform work on the project shall complete the safety

orientation training available on the internet at www.BNSFContractor.com, hereinafter called, "Internet Safety Orientation". If the contractor's employee, representative or agent is not regularly assigned to perform work on the project, hereinafter called "Flexible Worker(s)", the contractor shall ensure that any Flexible Worker receives appropriate safety training prior to performing any work on the Railroad's property, right—of way or in an area that may impact the Railroad's operations. The content of safety training for Flexible Workers shall include the information covered in the Internet Safety Orientation. The approximate cost of the Internet Safety Orientation is \$11 per person, subject to annual escalation.

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

4.0 Interference with Railroad Operations.

- **4.1** The contractor shall arrange and conduct all work so that there shall be no interference with the Railroad's operations, including train, signal, telephone and telegraphic services; or damage to the Railroad's property; poles, wires and other facilities of tenants, licensees, easement grantees and invitees on the Railroad's right of way. Whenever work may affect the operations or safety of trains, the method of doing such work shall first be submitted to the Railroad Engineer for approval, but such approval shall not relieve the contractor from liability. Any work to be performed by the contractor that requires flagging service or inspection service shall be deferred by the contractor until the flagging service required by the Railroad is available at the job site.
- **4.2** Whenever work within the Railroad's right of way is of such a nature that impediment to the Railroad's operations is unavoidable, such as use of runaround tracks or necessity for reduced speed, the contractor shall schedule and conduct these operations so that such impediment is reduced to the absolute minimum.
- **4.3** Should conditions arising from, or in connection with the work require that immediate and unusual provisions be made to protect the Railroad's operations and property, the contractor shall make such provisions. If in the judgment of the Railroad Engineer, or the Engineer if the Railroad Engineer is absent, such provision is insufficient, the Railroad Engineer or Engineer may require or provide such provisions as deem necessary. In any event, such provisions shall be at the contractor's expense and without cost to the Railroad or the Commission.
- **4.4** The contractor shall be responsible for any damage to the Railroad as a result of work on the project, which shall include but not be limited to interference with the normal movement of trains caused exclusively by the work performed by the contractor. The contractor shall be responsible for damages for the Railroad's train delays that are caused exclusively by the contractor. The Railroad agrees not to perform any act to unnecessarily cause any train delay. The damages for train delays per freight hour will be billed at an average rate per hour as determined from the Railroad's records. These records shall be provided by the Railroad, upon request, to the Commission or the Commission's contractor.

5.0 Track Clearances.

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

6.0 Construction Procedures.

- **6.1 General.** Construction work on the Railroad's property shall be:
 - (a) Subject to the inspection and review of the Railroad.
 - (b) In accordance with the Railroad's written outline of specific conditions.
 - (c) In accordance with this special provision.
- **6.2 Excavation.** The subgrade of an operated track shall be maintained with the berm edge at least 12 feet from centerline of track and not more than 26 inches below top of the rail. The contractor will not be required to make existing section meet this specification if substandard, in which case the existing section will be maintained. The contractor shall cease all work and notify the Railroad immediately before continuing excavation in the work area if obstructions are encountered which do not appear on the drawings. If the obstruction is a utility and the owner of the utility can be identified, then the contractor shall also notify the owner immediately. If there is any doubt about the location of underground cables or lines of any kind, no work shall be performed until the exact location has been determined. There will be no exceptions to these instructions. Additionally, all excavations shall be conducted in compliance with applicable Occupational Safety and Health Act regulations and, regardless of depth, shall be shored where there is any danger to tracks, structures or personnel. Any excavations, holes or trenches on the Railroad's property shall be covered, guarded and/or protected when not being worked on. When leaving work site areas at night and over weekends, the areas shall be secured and left in a condition that will ensure that Railroad's employees and other personnel who may be working or passing through the area are protected from all hazards. All excavations shall be back filled as soon as possible.
- **6.3 Excavation for Structure.** The contractor shall be required to take special precaution and care in connection with excavating, shoring pits and in driving piles for footings adjacent to tracks to provide adequate lateral support for the tracks and the loads which the tracks carry, without disturbance of track alignment and surface, and to avoid obstructing track clearances with working equipment, tools or other material. The procedure for doing such work, including

need of and plans for shoring, shall be approved by the Railroad Engineer before work is performed, but such approval shall not relieve the contractor from liability. Before submission of plans to the Railroad Engineer for approval, the Engineer will first review such plans in accordance with the Missouri Standard Specifications for Highway Construction, hereinafter called "Standard Specifications". The responsibility for the design and construction of the sheeting rests solely with the contractor. The temporary shoring along the railroad tracks shall be designed for the Cooper E80 loading. The design shall insure that the shoring is braced or substantially securely to prevent movement. The contractor shall submit plans for the temporary shoring that shall be signed, sealed, and stamped in accordance with the laws relating to Architects and Professional Engineers, Chapter 327, RSMo. and then submitted for review by the Engineer.

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

6.6 Blasting.

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

6.6.2 The Railroad Engineer will:

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

6.8 Storage of Materials and Equipment.

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

6.10 Buried Cable and Other Buried Facilities.

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

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

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

8.0 Flagging Services.

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

8.2 Scheduling and Notification.

- **8.2.1** Not later than the time that approval is initially requested to begin work on the Railroad's right of way (30 days), contractor shall furnish to the Railroad and the Commission a schedule for all work required to complete the portion of the project within Railroad's right of way and arrange for a job site meeting between the contractor, the Engineer, and the Railroad Engineer. Flaggers may not be provided until the job site meeting has been conducted and the contractor's work scheduled.
- **8.2.2** The contractor shall be required to give the Railroad Engineer at least 30 days of advance written notice of intent to begin work within Railroad's right of way in accordance with this special provision. Once begun, if such work is then suspended at any time, or for any reason, the contractor shall be required to give the Railroad Engineer at least 5 working days of advance notice before resuming work on Railroad's right of way. Such notices shall include sufficient details of the proposed work to enable the Railroad Engineer to determine if flagging will be required. If such notice is in writing, the contractor shall furnish the Engineer a copy; if notice is given verbally, the notice shall be confirmed in writing with copy to the Engineer. If flagging is required, no work shall be undertaken until the flagger or flaggers are present at the job site. Obtaining a flagger or flaggers may take up to 30 days to obtain initially from the Railroad. When flagging begins, the flagger is usually assigned by the Railroad to work at the project site on a continual basis until no longer needed and cannot be called for on a spot basis.

If flagging becomes unnecessary and is suspended, obtaining a flagger or flaggers may take up to 30 days to again obtain from the Railroad. Due to Railroad labor agreements, 10 working days notice may be necessary before flagging services may be discontinued and responsibility for payment stopped. Notification for flagging should be addressed to:

Mr. Brian Hennigh BNSF Railroad 620-223-7510 Brian.Hennigh@bnsf.com

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

8.3 Payment.

- **8.3.1** The Commission will pay the Railroad directly for the cost of flagging services associated with the project by deducting the amount from the normal contractor payments.
- **8.3.2** The Railroad shall submit progress invoice to the Engineer during the time flagging services are required. A final invoice shall be submitted to the Engineer within 180 days of completion of the project. This is defined as the point in time at which the Commission and the Railroad both accept the project and the contractor is relieved of contractual obligation. Should the invoice not be received within this time period, the Railroad will be responsible for obtaining payment directly from the contractor.
- **8.3.3** Should a dispute between the Railroad, the Commission and the contractor develop concerning the cost of flagging service or should the contractor fail to promptly pay the Railroad for flagging services, the full amount of the Railroad's invoice will be deducted from the contractor's payment request. However, The Commission will send only 95 percent of the amount requested to the Railroad. The Commission will make a corrected payment once a settlement is reached between the Railroad, the Commission and the contractor.
- **8.3.4** The contractor shall be responsible for arranging needed flagging services as required by the Railroad to accomplish the highway improvement.
- **8.3.5** The cost of flagging service is approximately \$1,300 per day based on an 8-hour work day and a 40-hour work week. This cost includes the base pay for the flagger, overhead, and per diem charge for travel expenses, meals and lodging. The charge to the contractor by the Railroad will be the actual cost based on the rate of pay for the Railroad's employees who are available for flagging service at the time the service is required. Work by a flagger in excess of 8 hours per day or 40 hours per week but not more than 12 hours a day will result in overtime pay at 1 1/2 times the appropriate rate. Work by a flagger in excess of 12 hours per day will result in overtime pay at 2 times the appropriate rate. If work is performed on a holiday, the flagging rate is 2 1/2 times the normal rate. Railroad expenses incurred preparing and handling invoices will also be charged to the contractor and/or the Commission. Charges to the contractor and/or the Commission by the Railroad shall be in accordance with applicable provisions of Volume 1, Chapter 4, §3 and Volume 6, Chapter 6, §2, Subsection 1 of the Federal-Aid Highway Program Manual issued by the Federal Highway Administration, including all current amendments. Flagging costs are subject to change. The above estimates of

flagging cost are provided for information only and are not binding in any way. Each time a flagger is called, the minimum period for billing will be the 8 hour basic day unless the flagger can be assigned to other Railroad work during the work day.

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

8.4 Verification.

- **8.4.1** Any complaints concerning a flagger shall be resolved in a timely manner. If need for a flagger is questioned, please contact the Railroad Engineer and Mr. John Caufield, Manager of Public Projects at (817) 789 0879. All verbal complaints shall be confirmed in writing by the contractor within 5 working days with copy to the Railroad Engineer and Engineer. All written correspondence shall be addressed to Mr. Caufield as shown in Section 2.1 of this job special provision.
- **8.4.2** The Railroad flagger assigned to the project will be responsible for notifying the Engineer upon arrival at the job site on the first day, or as soon thereafter as possible, that flagging services begin and on the last day that flagger performs such services for each separate period that services are provided. The Engineer will document such notification in the project records.

9.0 Haul Across Railroads.

- **9.1** Where the plans show or imply that materials of any nature must be hauled across the Railroad's tracks, unless the plans clearly show that the Commission has included arrangements for such haul in the agreement with the Railroad, the contractor shall be required to make all necessary arrangements with the Railroad regarding means of transporting such materials across the Railroad's tracks. The contractor shall be required to bear all costs incidental to such crossings, including flagging, whether services are performed by contractor's own forces or by Railroad's personnel.
- **9.2** No crossing may be established for use of the contractor for transporting materials or equipment across the tracks of the Railroad unless specific authority for the installation, maintenance, necessary watching and flagging thereof and removal, all at the expense of the contractor, is first obtained from the Railroad Engineer.
- **10.0** Work for the Benefit of the Contractor. All temporary or permanent changes in wire lines or other facilities which are considered necessary to the project are shown on the plans, and are included in the agreement between the Commission and the Railroad or will be covered by appropriate revisions to same which will be initiated and approved by the Commission and/or the Railroad. Should the contractor desire any changes in addition to the above, then contractor shall make separate arrangements with the Railroad for same to be accomplished at the contractor's expense.
- **11.0 Cooperation and Delays.** The contractor shall arrange a schedule with the Railroad for accomplishing staged construction involving work by the Railroad or tenants, licensees, easement grantees and invitees of the Railroad. In arranging a schedule, the contractor shall ascertain, from the Railroad, the lead time required for assembling crews, materials and make due allowance. No charge of claims of the contractor against the Railroad will be allowed for hindrance or delay on account of railway traffic for any work done by the Railroad, other delay

incident to or necessary for safe maintenance of railway traffic, or for any delays due to compliance with this special provision.

- **12.0 Trainman's Walkways.** Along the outer side of each exterior track of multiple operated track and on each side of single operated track, an unobstructed continuous space suitable for trainman's use in walking along trains shall be maintained extending to a line not less than 12 feet from centerline of track. Any temporary impediments to walkways and track drainage encroachments or obstructions allowed during work hours while Railway's protective service is provided shall be removed before the close of each work day. Any excavation near the walkway, the contractor shall install a handrail with a 12 feet minimum clearance from centerline of track.
- **13.0 Insurance.** The amount of work to be performed upon, over or under Railroad's right of way is estimated to be 1 (one) percent of the contractor's total bid for the project.
- **13.1** In addition to any other forms of insurance or bonds required under the terms of the contract and specifications, Contractor must, at its sole cost and expense, procure and maintain during the life of this Agreement the following insurance coverage:
 - (a) Commercial General Liability insurance. This insurance shall contain broad form contractual liability with a combined single limit of a minimum of \$2,000,000 each occurrence and an aggregate limit of at least \$6,000,000 but in no event less than the amount otherwise carried by the contractor. Coverage must be purchased on a post 2004 ISO occurrence form or equivalent and include coverage for, but not limit to the following:
 - Bodily Injury and Property Damage
 - Personal Injury and Advertising Injury
 - Fire legal liability
 - Products and completed operations

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

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

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

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

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

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

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

- Waiver of subrogation in favor of and acceptable to Railway.
- Additional insured endorsement in favor of and acceptable to Railway.
- · Separation of insureds.
- The policy shall be primary and non-contributing with respect to any insurance carried by Railway.
- (c) Workers Compensation and Employers Liability insurance including coverage for, but not limited to:
 - Contractor's statutory liability under the worker's compensation laws
 of the state(s) in which the work is to be performed. If optional under
 State law, the insurance must cover all employees anyway.
 - Employers' Liability (Part B) with limits of at least \$500,000 each accident, \$500,000 by disease policy limit, \$500,000 by disease each employee.

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

- Waiver of subrogation in favor of and acceptable to Railway.
- (d) Railroad Protective Liability insurance naming only the Railway as the Insured with coverage of at least \$2,000,000 per occurrence and \$6,000,000 in the aggregate. The policy Must be issued on a standard ISO form CG 00 35 10 93 and include the following:
 - Endorsed to include the Pollution Exclusion Amendment (ISO form CG 28 31 10 93)
 - Endorsed to include the Limited Seepage and Pollution Endorsement.
 - Endorsed to remove any exclusion for punitive damages.
 - No other endorsements restricting coverage may be added.
 - The original policy must be provided to the Railway prior to performing any work or services under this Agreement

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

13.2 Other Requirements:

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

- **13.2.2** Contractor agrees to waive its right of recovery against Railway for all claims and suits against Railway. In addition, its insurers, through the terms of the policy or policy endorsement, waive their right of subrogation against Railway for all claims and suits. The certificate of insurance must reflect the waiver of subrogation endorsement. Contractor further waives its right of recovery, and its insurers also waive their right of subrogation against Railway for loss of its owned or leased property or property under contractor's care, custody or control.
- **13.2.3** Contractor is not allowed to self-insure without the prior written consent of Railway. If granted by Railway, any deductible, self-insured retention or other financial responsibility for claims must be covered directly by contractor in lieu of insurance. Any and all Railway liabilities that would otherwise, in accordance with the provisions of this Agreement, be covered by contractor's insurance will be covered as if contractor elected not to include a deductible, self-insured retention or other financial responsibility for claims.
- **13.2.4** Prior to commencing the Work, contractor must furnish to Railway an acceptable certificate(s) of insurance including an original signature of the authorized representative evidencing the required coverage, endorsements, and amendments and referencing the contract audit/folder number if available. Contractor shall notify Railway in writing at least 30 days prior to any cancellation, non-renewal, substitution or material alteration. Upon request from Railway, a certified duplicate original of any required policy must be furnished. Contractor should send the certificate(s) to the following address:

Railroad:	Commis	ssion:			
BNSF Railway Company	Mr.	D	ave		Ahlvers
P.O. Box 140528	State	Construction	and	Materials	Engineer
Kansas City, MO 64114	MoDOT				
Toll Free: 877-576-2378	P.O.		Box		270
Fax number: 817-840-7487	Jefferso	n City	,	MO	65102
Email:				BNSF@cer	tfocus.com
www.certfocus.com					

- **13.2.5** Any insurance policy must be written by a reputable insurance company acceptable to Railway or with a current Best's Guide Rating of A- and Class VII or better, and authorized to do business in the state(s) in which the service is to be provide.
- **13.2.6** Contractor represents that this Agreement has been thoroughly reviewed by contractor's insurance agent(s)/broker(s), who have been instructed by contractor to procure the insurance coverage required by this Agreement. Allocated Loss Expense must be in addition to all policy limits for coverages referenced above. Not more frequently than once every five years, Railway may reasonably modify the required insurance coverage to reflect then-current risk management practices in the railroad industry and underwriting practices in the insurance industry.
- **13.2.7** If any portion of the operation is to be subcontracted by contractor, contractor must require that the subcontractor provide and maintain the insurance coverages set forth herein, naming Railway as an additional insured, and requiring that the subcontractor release, defend and indemnify Railway to the same extent and under the same terms and conditions as contractor is required to release, defend and indemnify Railway herein.

- **13.2.8** Failure to provide evidence as required by this section will entitle, but not require, Railway to terminate this Agreement immediately. Acceptance of a certificate that does not comply with this section will not operate as a waiver of contractor's obligations hereunder.
- **13.2.9** The fact that insurance (including, without limitation, self-insurance) is obtained by contractor will not be deemed to release or diminish the liability of contractor including, without limitation, liability under the indemnity provisions of this Agreement. Damages recoverable by Railway will not be limited by the amount of the required insurance coverage.
- **13.2.10** For purposes of this section, Railway means "Burlington Northern Santa Fe LLC", "BNSF RAILWAY COMPANY" and the subsidiaries, successors, assigns and affiliates of each.
- **13.2.11** Railroad will not accept binders as evidence of insurance, the original policy shall be provided. The named insured, description of the work and designation of the job site to be shown on the Policy are as follows:
 - (a) Named Insured: BNSF Railway Company
 - (b) Description and Designation: J7S3141 – Resurfacing (mill & fill) Route F up to both sides of crossing. BNSF Ft. Scott Subdivision, Greene County, DOT# 669 802B (MP 183.5) in Ash Grove, MO.
- **13.2.12** The contractor must notify BNSF Manager of Public Projects at <u>John.Caufield@BNSF.com</u> when applying for railroad insurance coverage.
- **13.3** If any part of the work is sublet, similar insurance and evidence thereof in the same amounts as required of the prime contractor, shall be provided by or in behalf of the subcontractor to cover the subcontractor's operations. Endorsements to the prime contractor's policies specifically naming subcontractors and describing their operations will be acceptable for this purpose.
- **13.4** All Insurance hereinbefore specified shall be carried until all work required to be performed under the terms of the contract has been satisfactorily completed within the limits of the Railroad's right of way as evidenced by the formal acceptance by the Commission. Insuring Companies may cancel insurance by permission of the Commission and Railroad or on 30 days written notice to the Railroad and Commission.
- 14.0 Hazardous Materials Compliance and Reporting. Contractor shall be responsible for complying with all applicable federal, state and local governmental laws and regulations, including, but not limited to environmental laws and regulations (including but not limited to the Resource Conservation and Recovery Act, as amended; the Clean Water Act, as amended; the Oil Pollution Act, as amended; the Hazardous Materials Transportation Act, as amended; and the Comprehensive Environmental Response, Compensation and Liability Act, as amended), and health and safety laws and regulations. In addition to the liability provisions contained elsewhere in this job special provision, the contractor hereby indemnifies, defends and holds harmless the Railroad for, from and against all fines or penalties imposed or assessed by federal, state and local governmental agencies against the Railroad which arise out of contractor's work under this special provision. Notwithstanding the preceding sentence, the contractor will not be liable for pre-existing hazardous materials or hazardous substances discovered on Railroad's property or right of way so long as such hazardous materials or hazardous substances were not caused by (in whole or in part) contractor's work, acts or

omissions. If contractor discovers any hazardous waste, hazardous substance, petroleum or other deleterious material, including but not limited to any non-containerized commodity or material, on or adjacent to Railroad's property, in or near any surface water, swamp, wetlands or waterways, while performing any work under this special provision, the contractor shall immediately:

- (a) Notify the Railroad's Resource Operations Center at (800) 832-5452, of such discovery.
- (b) Take safeguards necessary to protect employees, subcontractors, agents and/or third parties.
- (c) Exercise due care with respect to the release, including the taking of any appropriate measure to minimize the impact of such release
- **15.0 Personal Injury Reporting.** The Railroad is required to report certain injuries as a part of compliance with Federal Railroad Administration ("FRA") reporting requirements. Any personal injury sustained by any employee of the contractor, subcontractor or contractor's invitees while on the Railroad's property shall be reported immediately, by phone or mail if unable to contact in person, to the Railroad's representative in charge of the project. The Non-Employee Personal Injury Data Collection Form is to be completed and sent by Fax to the Railroad at (817) 352-7595 and to the Railroad's Project Representative no later than the close of shift on the date of the injury.
- **16.0** Failure to Comply. In the event the contractor violates or fails to comply with any of the requirements of this special provision, the below orders will be applied. Any such orders shall remain in effect until the contractor has remedied the situation to the satisfaction of the Railroad Engineer and the Engineer.
 - (a) The Railroad Engineer may require that the contractor to vacate the Railroad's property.
 - (b) The Engineer may withhold all monies due to the contractor until contractor has remedied the situation to the satisfaction of the Railroad Engineer and the Engineer.
- **17.0 Payment for Cost of Compliance.** No separate payment will be made for any extra cost incurred on account of compliance with this special provision. All such cost shall be included in the contract unit price for other items included in the contract. Railroad will not be responsible for paying the contractor for any work performed under this special provision.

H. 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).
- **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.
- I. Contractor Quality Control for Plant Mix Bituminous Surface Leveling NJSP-15-21A
- **1.0 Description.** The contractor shall provide Quality Control (QC) testing and shall perform verification procedures associated with the production and placement of Plant Mix Bituminous Surface Leveling Mixture in accordance with this provision.
- **2.0 Asphalt Plant Requirements.** The contractor shall perform quality control testing in the production of the Surface Leveling Mixture and report the results electronically on MoDOT-provided forms. All reports shall include the Contract ID, Project Number, Route, County, and Job Mix number.
- **2.1** Calibration of the asphalt plant shall be in accordance with Sec 403.17.2.2. Record retention for verification of test reports shall be in accordance with Sec 403.17.3.2.
- **2.2** At a minimum, the contractor shall perform one QC sieve analysis test for each day of production of Surface Level mixture in excess of 100 tons to verify the aggregate is within the required gradation range. Results of the QC sieve analysis test shall be reported to the engineer daily. A split of each sample shall be clearly labeled and stored by the contractor in a manner that prevents contamination. The engineer will collect a minimum of one random QC split sample, and one full sample from plant production, for testing per each 10,000 tons of

production. Uncollected QC split samples shall be retained by the contractor until the engineer authorizes disposal or until the Final Inspection, whichever occurs earlier.

- **2.3** The contractor shall monitor the quantity of asphalt binder used in the production of the mix, including any commercial mix, and report that quantity to the engineer. Original asphalt binder delivery tickets shall accompany the report submitted to the engineer. The engineer will perform a minimum of one asphalt binder content test per each 10,000 tons of production for any project that exceeds a total of 5,000 tons of production.
- **2.4** The contractor shall take a daily QC sample of the asphalt binder per instructions in Section 460.3.13 of the EPG. The engineer will collect the QC samples and ship to the MoDOT Central lab for random testing. In addition, the engineer will take a minimum of one random Quality Assurance sample per project from the binder line. The engineer sample will be shipped to the Central Lab along with the daily samples and will be designated for testing.
- **2.5** The contractor shall perform one moisture content test for each day of production of Surface Level mixture in excess of 100 tons. The frequency of the moisture test may be reduced if approved by the engineer.
- **3.0 Roadway Requirements.** The contractor shall perform quality control verification of the Surface Leveling Mixture on the roadway and shall monitor the asphalt tonnage placed in relation to plan quantity.
- **3.1 Irregularities.** Additional tons of Surface Leveling mix will be provided for irregularities in the existing roadway surface. The tonnage specified for irregularities is an estimated quantity and shall only be placed at locations where it is necessary to fill ruts and other low points. Prior to placing the mix, the contractor and engineer shall evaluate the entire route and develop a plan that best utilizes the tonnage needed for irregularities. Any excess quantity of irregularities shall not be placed.
- **3.2 Tack.** On the first day of production, the contractor shall demonstrate proper application of tack coat in the presence of the engineer. Thereafter, when the engineer is not present to witness the application of the tack coat, the contractor shall document the tack application by taking a minimum of two high-resolution date/time stamped photographs of the tacked surface per one-mile segment. Pictures should be taken just in front of the paver in order to account for loss of tack from truck tires. The contractor shall also monitor and document the application rate. The contractor shall take distributor readings at the beginning and ending of each shift and document the quantity used.
- **3.3 Spreading and Rolling.** On the first day of production, the contractor shall demonstrate successful spreading and compaction of the mixture, including proper rolling patterns, in the presence of the engineer. Thereafter, the contractor shall monitor all roadway production procedures and document daily. Use of approved Intelligent Compaction technology is an allowable substitute for daily documentation.
- **3.4 Monitoring of Quantity.** The contractor shall monitor the quantity of Surface Level mix placed and report that information to the engineer and production staff as specified herein.
- **3.4.1** The contractor shall verify that the quantity of Surface Leveling mix in the contract for each route is sufficient to cover the roadway as shown on the typical sections, including any surface irregularities. Any discrepancies shall be brought to the engineer's attention in writing

prior to the pre-construction conference. Plan quantity shall be defined as the total tons computed to cover the surface area according to the typical section, plus any amount pre-approved by the engineer for pavement irregularities.

- **3.4.2** The contractor shall provide temporary log mile reference points at no less than $\frac{1}{2}$ mile intervals along each route to monitor the tons of Surface Leveling mix laid in relation to plan quantity. Entrances, shoulders, or other irregular areas will be monitored as directed by the engineer.
- **3.4.3** During production, the contractor shall document the total tons placed in each one-mile segment, along with the plan quantity and the percent over/under for that segment. The cumulative quantity and percent over/under for the route should also be documented. After each one-mile segment, the contractor shall provide a status report to the production manager and the engineer. When the engineer is not present on the project, the contractor shall send an electronic status report to the engineer.
- **3.4.4** The goal is to keep the placed quantity within 2% of plan quantity for the project. The engineer will monitor the status reports and will advise the contractor on how to proceed when there is an excessive variance from plan quantity. The engineer may decrease the frequency of the electronic status reports when the variances are consistently low.
- **3.4.5** The contractor shall collect asphalt tickets from the delivery trucks and group them per each one-mile segment. The contractor shall submit to the engineer a daily summary report that includes all of the information specified in Section 3.4.3. The contractor shall sign the summary report confirming that the information is accurate and that the attached tickets represent the asphalt material placed.
- **3.4.6** The contractor shall be equipped with a contractor-furnished cellular device capable of providing and maintaining a reliable means of immediate communication with the engineer when the engineer is not present on the project.
- **4.0 Excessive Quantity.** If the contractor places Surface Level mix on any one-mile segment, or any other isolated areas, in excess of plan quantity by 5% or more, without prior approval from the engineer, further investigation may be required to determine if the excess was warranted. If directed by the engineer, the contractor shall core the pavement at locations established by the engineer to determine the amount that was excessive, if any. No payment will be made for the cost to core the pavement or for the tons of Surface Level mix that the engineer determines to be excessive. If the amount of Surface Level mix is determined to be justified, payment will be made for the mix, and for the cost of coring at the fixed price established in Sec 109. Placement of asphalt in excess of plan quantity for two consecutive segments without prior approval from the engineer may result in issuance of an Order Record to stop work.
- **5.0 Basis of Payment.** No direct payment will be made for compliance with this provision. All costs shall be considered completely covered under the pay items provided in the contract.
- J. Liquidated Damages for Winter Months JSP-04-17
- **1.0 Description.** Revise Sec 108.8.1.3 (a) and (b) and substitute the following for the project:

- (a) Liquidated damages will be assessed from December 15 to March 15
- (b) Liquidated damages will be assessed for Saturdays, Sundays and Holidays.

K. <u>Pavement Marking Log</u> - SW

- **1.0 Description.** This work shall consist of the Contractor documenting the location of all existing pavement markings prior to coldmilling or resurfacing and installing new pavement markings to match the scheme that was in place prior to the project.
- **2.0 Construction Requirements.** Prior to the start of resurfacing work, the Contractor shall document the color, type, and location of the existing pavement markings, including any change in pavement marking (e.g., solid yellow to intermittent yellow on the centerline) and no passing zones. The Contractor shall submit the method of documentation to the Engineer for approval prior to recording the existing pavement marking information.
- **2.1** The existing pavement marking documentation provided by the Contractor shall include the location of existing pavement markings by either station or log mile. The Engineer shall reserve the right to make adjustments to the final pavement marking locations. The Engineer will provide the Contractor with any adjusted locations. Under no circumstances shall the Contractor make adjustments to the location of permanent pavement markings without the Engineer's approval.
- 2.2 All permanent pavement markings shall be installed in accordance with Sec 620.
- **3.0. Temporary Pavement Marking.** The Contractor shall provide temporary pavement marking in accordance with Sec 620 and Standard Plan 620.10. No compensation will be made to the Contractor for temporary pavement marking.
- 4.0 Method of Measurement. Measurement will be made in accordance with Sec 620.
- **5.0 Basis of Payment.** No direct compensation will be made to the Contractor for compliance with this provision. All costs associated with the equipment, labor, materials, and time necessary to fulfill the requirements of this provision shall be considered completely covered by the pavement marking (Sec 620) line items in the contract.

L. <u>Permanent Pavement Marking</u> - SW

- **1.0 Description.** This work shall consist of furnishing and placing preformed pavement marking tape, as specified, at locations shown on the plans or as approved by the engineer. This includes, but not limited to, 24" White (Stop Bars) and 24" Yellow (Hash Mark), 6" White for Crosswalks, Turn Arrows, Railroad Crossings, Yield Markings, and the word "ONLY". This work shall be in accordance with Section 620 and specifically as follows.
- **2.0 Construction Requirements.** The contractor shall place the preformed pavement marking tape <u>after</u> the permanent centerline, edge line, and lane line marking is installed by the contractor or by others. The contractor will have 5 five days after the permanent centerline, edge line, and lane line markings are placed to start the preformed pavement marking tape installation and shall be placed in accordance with manufacturer's recommendations or as approved by the engineer.

2.1 In addition, on roadways open to traffic, permanent centerline, edge line, and lane line markings shall be in place no later than five days after the final paving operations. This requirement applies per individual route if multiple routes are included in a contract or if a 15 mile section of an individual route is open to traffic within a contract. To fulfill this requirement, the contractor may have to mobilize in more than once for the installation of permanent centerline, edge line, and lane line markings. The contractor will also need to coordinate the permanent marking with the installation of rumble strips.

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

M. Cooperation Between Contractors - SW

- **1.0** This contract is one of two projects essential to the overall improvements along Route F in Ash Grove. Resurfacing improvements, project J7S3141, will be constructed along Route F from Route 160 to Route 266. Resurfacing improvements will be constructed concurrently with the ADA improvements. ADA improvements, project J7S3137, will be constructed along Route F (Calhoun Avenue) from Main Street to Duncan Street and at the intersection of Routes 160, F, and V.
- **2.0** The final locations of some of the stop bars and crosswalk lines at the intersections of Route 160, F, and V and Route F (Calhoun Avenue) and Main Street will not be known until the ADA improvements are constructed at these locations. The resurfacing contractor shall install temporary stop bars and crosswalk lines at these locations, and shall maintain the temporary markings until permanent markings are installed or as directed by the engineer. The ADA contractor shall coordinate with the resurfacing contractor to ensure that the permanent pavement marking locations will be compatible with the proposed ADA improvements.
- **3.0** When necessary for proper prosecution of work, each contractor shall permit the other access through the overlapping construction areas and the use of any access or haul roads constructed by others.
- **4.0 Basis of Payment.** The accepted quantity of temporary stop bars and crosswalk lines will be paid for at the contract unit price 620-99.03, Misc. Preformed Removable Marking Tape, 24 in. White and 620-99.03, Misc. Preformed Removable Marking Tape, 6 in. White.

N. Flagging Procedure for Two-Lane Roadways (3-2-1 Cone Procedure) NJSP-17-03A

- **1.0 Description.** Flagging operations shall be in accordance with the Manual on Uniform Traffic Control Devices (MUTCD) Chapter 6, Section 107 and 616 in Missouri Standard Specifications for Highway Construction, Missouri Standard Plans for Highway Construction, temporary traffic control plans, and as described herein.
- **2.0 Procedures for Flagging Short**, **Intermediate**, **or Long-Term Stationary Operations**. This procedure includes the use of three traffic cones or other channelizing devices.

- **2.1 Step 1.** The flagger shall place three cones across the lane of traffic to be stopped, from centerline to shoulder. When no vehicles are present, the flagger should remain on the shoulder with the stop paddle visible.
- **2.2 Step 2.** When traffic has stopped, the flagger shall move towards the centerline of the roadway, keeping the stop paddle visible, and keeping a visual contact with the stopped drivers. Once the flagger has confirmed that opposing traffic is clear, the flagger shall prepare to release the stopped traffic.
- **2.3 Step 3a.** If the vehicles are to travel in the current lane, the flagger shall remove the center cone from the center of the lane.
- **2.4 Step 3b.** If the vehicles are to travel in the opposite lane, the three cones shall remain across the closed lane.
- **2.5 Step 4.** If opening the lane (Step 3a above) the flagger shall walk back to the shoulder with the cone, turn the stop paddle to slow, and then release traffic using a hand signal to direct vehicles between the two remaining cones. If releasing traffic to the other lane (Step 3b above) the flagger shall remain near the centerline of the roadway, turn the stop paddle to slow, and use a hand signal to direct the traffic around the cones into the open lane.
- **2.6** Once all traffic has cleared, the flagger shall return the slow paddle to stop. The flagger shall replace the cone to the center of the lane or leave the cones across the lane. The flagger then returns to the shoulder and repeats the steps.
- **2.7** If the roadway width is less than 12 feet, the number of cones may be reduced to two or one, or other channelizing devices may be used.
- **3.0 Basis of Payment.** No direct payment will be made for any cost associated with this provision.

<u>Pictorial Representation of Steps for Flagging Procedure for Two-Lane Roadways (3-2-1 Cone Procedure)</u>





STEP 1 STEP 2





STEP 3 STEP 4

O. <u>Temporary Short-Term Rumble Strips</u> JSP-13-05E

1.0 Description. The work shall include furnishing, installing, maintaining, removing, and relocating the short-term rumble strips, as shown in the plans, or as designated by the engineer.

2.0 Material.

- **2.1** The short-term rumble strips shall be 10 to 12 feet in length, minimum of 8 inches wide, $\frac{3}{4}$ to $\frac{1}{4}$ inch thick, fabricated from a polymer material, and orange in color.
- **2.2** The short term-rumble strips shall not curl or deform across the width of the strip, maintaining its rigidity.

3.0 Construction.

- **3.1** Each set shall consist of three individual strips spanning a single lane, spaced in accordance with the plans or as directed by the engineer. The short-term rumble strips shall be installed and removed in accordance with manufacturer's recommendation.
- **3.2** The contractor shall monitor, maintain alignment, and repair if needed the short-term rumble strips during construction. Short-term rumble strips shall not be placed on roadways when there are no workers present.
- **3.3** Strips shall not extend onto the shoulder without the approval of the Engineer.
- **4.0 Method of Measurement.** Measurement of short-term rumble strips will be based per each set.
- **5.0 Basis of Payment.** The accepted quantity of Temporary Short-Term Rumble Strips sets will be paid for at the contract unit price for 616-20.04, Temporary Short-Term Rumble Strips, per each set. The short-term rumble strips unit bid price shall include the cost of all labor, equipment and materials to install, maintain, remove and relocate the rumble strips during the construction of the project.

P. Plant Mix Bituminous Pavement Aggregate Requirement (BP-2)

1.0 Description. In addition to the requirements of Sec 401.3, the total aggregate prior to mixing with asphalt binder shall be in accordance with the following gradation requirements:

Sieve Size	Percent Passing by Weight
	BP-2
1 inch	100
3/4 inch	100
1/2 inch	100
3/8 inch	90-100
No. 4	60-90
No. 8	40-70
No. 16	
No. 30	15-35
No. 200	5-12

Q. Permanent Aggregate Edge Treatment - SW

- **1.0 Description**. This work shall consist of furnishing and placing aggregate material on the shoulders of the resurfaced route in areas indicated in the plans. This work and material shall be in accordance with Section 310 except as follows.
- **2.0 Construction Requirements.** The contractor shall furnish, haul and spread aggregate material to bring the shoulders up to match the overlaid pavement elevation as shown in the typical sections.
- **2.1** Aggregate material for the permanent aggregate edge treatment shall be a 1" commercial base. Any material shall be approved by engineer prior to use.

2.2 Aggregate shall be simultaneously deposited and spread on the sub-grade and shall not be deposited on the pavement or shoulder and bladed into place without prior approval from the engineer. Aggregate material shall be shaped according to the typical section and compacted until there is no visible evidence of further consolidation.

- **2.3** Density shall be obtained from reasonable compactive efforts consisting of no less than three passes with a roller until no further visible compaction can be achieved, or by other methods approved by the engineer.
- **2.4** After all placing, shaping, and compactive effort operations are completed, a tack coat in accordance with Section 407, shall be placed on all aggregate edge treatment at a target rate of 0.25Gal/SY.
- **3.0 Method of Measurement.** Measurement of material furnished for shoulder aggregate shall be per ton and in accordance with Section 310.5.3. Measurement for all tack will be in accordance with Section 407.5.
- **4.0 Basis of Payment.** The accepted quantities of permanent aggregate edge treatment will be paid for at the contract unit price for PERMANENT AGGREGATE EDGE TREATMENT, pay item 304-99.10, including all labor, equipment, and material costs required to fulfill the requirements of the special provision.

R. Culvert Location - SW

- **1.0 Description.** This work shall consist of the Contractor documenting the location of all existing crossroad culverts prior to conducting grading operations or placement of permanent aggregate edge treatment.
- **2.0 Construction Requirements.** Prior to the start of grading or edge treatment work, the Contractor shall document the location of the existing crossroad culverts. The Contractor shall submit the method of documentation to the Engineer for approval prior to recording the existing culvert location.
- **2.1** The documentation provided by the Contractor shall include the location of existing crossroad culverts by either station or log mile. Under no circumstances shall the Contractor begin grading or edge treatment work without the Engineer's approval.
- **2.2** The location of each crossroad culvert shall be indicated with a lathe or other identifier that can be seen during contractor operations.
- **2.3** The contractor shall exercise reasonable care in the locations of the crossroad culverts <u>and</u> all driveway culverts to ensure that grading or edge treatment operations do not result in the blockage of the culvert.
- **2.4** The contractor as directed by the engineer shall remove any material from all culverts that was placed by grading or edge treatment operations.
- **3.0 Basis of Payment.** No direct compensation will be made to the Contractor for compliance with this provision. All costs associated with the equipment, labor, materials, and time necessary

to fulfill the requirements of this provision shall be considered completely covered by the grading (Sec 212) line items in the contract.

S. <u>Contractor Furnished Surveying and Staking</u> - SW

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

- **1.0 Description**. The contractor shall be responsible for all layout required on the project. This responsibility shall include, but not be limited to the following: Construction signing, transition milling, pavement marking, loop detectors, etc.
- **1.1** The above list is not all inclusive. The contractor shall have the primary responsibility for these operations. The contractor shall provide the Resident Engineer with a staking plan layout for approval prior to the installation of signs. The RE will also provide assistance during this layout provided a request is submitted to the RE or Construction Project Manager 48 hours in advance. This will ensure that all permanently mounted traffic control devices remain consistent with District policy and avoid re-staking. If the contractor installs any signs without engineer approval, all costs associated with re-staking and/or relocation will be at the contractor's expense.
- **1.2** The intent of this provision is to increase the quality of our work zones and minimize negative impacts to the contractor's schedule that can result from delays in staking.
- **1.3** Any adjustments to the plan quantities or line numbers established in the contract shall be approved by the Engineer.
- **2.0 Basis of Payment.** No direct payment will be made to cover the costs associated with these additional requirements. All costs will be considered completely covered by the unit bid price submitted for Contractor Furnished Surveying and Staking.
- T. Damage to Existing Pavement, Shoulders, Side roads, and Entrances SW
- **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 is not 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 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 pavement, shoulders, side roads, or entrances shall be as determined by the engineer.
- **3.0 Method of Measurement.** No measurement of damaged pavement or shoulder areas or damaged 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 expenses.

U. Access to Commercial Properties - SW

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

- **1.1** The contractor shall contact each business to advise them of the work that will take place before working around each business entrance. In some cases where a property has more than one entrance, the property owner may have a preference on whether to have one entrance closed while working around it or whether to have the entrances worked around one-half at a time. The contractor is required to do the work according to each individual property owner's preference. The contractor is not to disturb any existing trees, landscaping, small block walls or irrigation lines. The contractor will solely be responsible for repairing any damage to the property caused by contractor operations.
- **2.0** Basis of Payment. No direct payment will be made to the contractor for all costs incurred with compliance of this provision.

V. <u>Gravel A or Crushed Stone B</u> - SW

- **1.0 Description**. This work shall consist of furnishing and placing gravel or crushed stone surfacing for transitions at aggregate side roads and entrances upon completion of overlay and shoulder work. This work and material shall be in accordance with Section 310 except as follows.
- **2.0 Construction Requirements.** The contractor shall furnish, haul and spread gravel or crushed stone surfacing to smooth up the transitions and eliminate any edge drop offs created at aggregate side roads and entrances created from the construction of shoulders as approved by the engineer.
- **3.0 Method of Measurement.** Measurement of material furnished for gravel or crushed stone will be made in accordance with Section 310.5.3, excluding any deductions for moisture.
- **4.0 Basis of Payment.** The accepted quantities of gravel or crushed stone will be paid for at the contract unit price, including all labor, equipment, and material costs required to fulfill the requirements of the special provision.

W. Disposition of Existing Signing JSP-12-01A

1.0 Description. All signing indicated for removal in the plans, shall be covered by the contractor and delivered to the following location. The contractor shall call the phone number listed below 48 hours prior to delivery and make arrangements for the delivery.

Republic Maintenance Lot Nick Capra, Maintenance Supervisor 1925 S State Hwy N Springfield, MO 65802

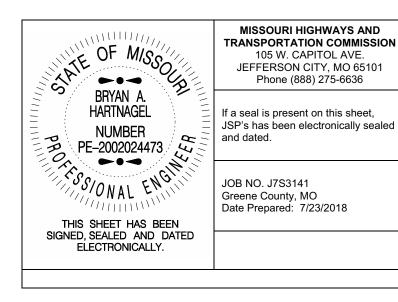
Phone: 417-732-2531

2.0 The contractor shall exercise reasonable care in the handling of the signs during the removal and transportation. Should any of the signs be damaged by the contractor's negligence, it shall be replaced at the contractor's expense.

3.0 Basis of Payment. Payment for removal and transportation of these signs, as shown in the plans, shall be considered as and completely covered by the contract unit price for Item No. 202-20.10, "Removal of Improvements", per lump sum.

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A. Construction Requirements



A. CONSTRUCTION REQUIREMENTS

- **1.0 Description.** This provision contains general construction requirements for this project.
- **2.0 Construction Requirements.** Plans for the existing structure(s) are included in the contract in the bridge electronic deliverables zip file for informational purposes only.
- **2.1** In order to assure the least traffic interference, the work shall be scheduled so that a lane closure is for the absolute minimum amount of time required to complete the work. A lane 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.
- **2.2** Qualified special mortar shall be a qualified rapid set concrete patching material in accordance with Sec 704. A qualified rapid set concrete patching material will not be permitted for repairing concrete deck (half-soling), deck repair with void tube replacement, full depth repair, modified deck repair and substructure repair (formed) unless a note on the bridge plans specifies that a qualified special mortar may be used.
- **2.3** Provisions shall be made to prevent any debris and materials from falling into the stream, lake or onto the roadway. Any debris and materials that falls below the bridge outside the limits mentioned previously and if determined necessary by the engineer, the debris shall be removed as approved by the engineer at the contractor's expense. Traffic under the bridge shall be maintained in accordance with the contract documents.
- **2.4** Any damage sustained to the remaining structure as a result of the contractor's operations shall be repaired or the material replaced as approved by the engineer at the contractor's expense.
- **2.5** Provisions shall be made to prevent damage to any existing utilities. Any damage sustained to the utilities as a result of the contractor's operations shall be the responsibility of the contractor. All costs of repair and disruption of service shall be as determined by the utility owners and as approved by the engineer.
- 3.0 Method of Measurement. No measurement will be made.
- **4.0 Basis of Payment.** Payment for the above described work will be considered completely covered by the contract unit price for other items included in the contract.

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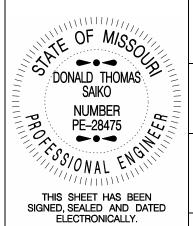
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MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 W. CAPITOL AVE. JEFFERSON CITY, MO 65102 Phone 1-888-275-6636

If a seal is present on this sheet, JSP's have been electronically sealed and dated.

JOB NUMBER: COUNTY, MO DATE PREPARED:

ADDENDUM DATE:

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

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County: Greene

JOB SPECIAL PROVISION

A. General - Federal JSP-09-02D

- **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 under "Bidding". 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 under "Business"; "Standards and Specifications". The effective version shall be determined by the letting date of the project.

General Provisions & Supplemental Specifications

Supplemental Plans to July 2018 Missouri Standard Plans For Highway Construction

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

B. <u>Contract Liquidated Damages</u> JSP-13-01B

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

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Notice to Proceed: December 3, 2018 Completion Date: December 1, 2019

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
J8S3083	20	\$1,800
J7S3141	87	\$1,800

- **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 \$250 per calendar day for each calendar day, or partial day thereof, that the work is not fully completed. For projects in combination, these damages will be charged in full for failure to complete one or more projects within the above specified completion date or calendar days.
- **4.0 Liquidated Damages for Road User Costs.** Should the contractor fail to complete the work on or before the completion date specified in Section 2.0, or within the number of calendar days specified in Section 2.1, whichever occurs first, the contractor will be charged road user costs in accordance with Sec 108.8 in the amount specified in Section 2.1 for each calendar day, or partial day thereof, that the work is not fully completed. These damages are in addition to the contract administrative damages and any other damages as specified elsewhere in this contract.

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

- **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 Conflict Resolution.** Any conflict resolution shall be in accordance with Sec 616.4. Failure to make corrections on time may result in the engineer suspending work. The suspension will be non-excusable and non-compensable regardless if road user costs are being charged for closures.

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2.0 Traffic Management Schedule.

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

- **2.2** The traffic management schedule shall conform to the limitations specified in Sec 616 regarding lane closures, traffic shifts, road closures and other width, height and weight restrictions.
- **2.3** The engineer shall be notified as soon as practical of any postponement due to weather, material or other circumstances.
- **2.4** In order to ensure minimal traffic interference, the contractor shall schedule lane closures for the absolute minimum amount of time required to complete the work. Lanes shall not be closed until material is available for continuous construction and the contractor is prepared to diligently pursue the work until the closed lane is opened to traffic.
- 2.5 Traffic Congestion. The contractor shall, upon approval of the engineer, take proactive measures to reduce traffic congestion in the work zone. The contractor shall immediately implement appropriate mitigation strategies whenever traffic congestion reaches an excess of 10 minutes to prevent congestion from escalating to 15 minute or above threshold. If disruption of the traffic flow occurs and traffic is backed up in queues of 15 minute delays or longer, then the contractor shall immediately review the construction operations which contributed directly to disruption of the traffic flow and make adjustments to the operations to prevent the queues from reoccurring. Traffic delays may be monitored by physical presence on site or by utilizing real-time travel data through the work zone that generate text and/or email notifications where available. The engineer monitoring the work zone may also notify the contractor of delays that require prompt mitigation. The contractor may work with the engineer to determine what other alternative solutions or time periods would be acceptable.

2.5.1 Traffic Safety.

- **2.5.1.1** 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** When a traffic queue extends 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 due to non-recurring congestion, 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 There are six major holiday periods shown below. All lanes shall be scheduled to be open to traffic during these holiday periods, from 12:00 noon on the last working day proceeding the

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holiday period until 9:00 a.m. on the first working day subsequent to the holiday period unless approved by the Engineer.

Memorial Day Independence Day & Friday, July 5, 2019 Labor Day Thanksgiving Christmas New Year's Day

- **3.2** The contractor shall not perform any construction operation on the roadway during restricted periods, holiday periods or other special events specified in the contract documents.
- **3.3** Any work requiring a reduction in the number of through lanes of traffic shall be completed during nighttime hours.

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 the police or other emergency agencies for incident management. In case of traffic accidents or the need for police to direct or restore traffic flow through the job site, the contractor shall notify police or other emergency agencies immediately as needed. The Resident Engineer's office shall also be notified when the contractor requests emergency assistance.

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

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

Missouri Highway Patrol Troop D: 417-895-6868	
Greene County Sheriff Department: 417-868-4040	
City of Willard Police Department: 417-742-3077	
City of Willard Fire Department: 417-685-3114	
MoDOT Incident Response 417-864-1160	
Emergency Only Numbers	
(*55 cell phone – Missouri Highway Patrol)	

- **2.1** This list is not all inclusive. Notification of the need for wrecker or tow truck services will remain the responsibility of the appropriate police agency.
- **2.2** The contractor shall notify 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 enforcement and emergency agencies, a report shall be furnished to the engineer on the status of incident management.
- **3.0** No direct pay will be made to the contractor to recover the cost of the communication equipment, labor, materials or time required to fulfill the above provisions.

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

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

Don Saiko, P.E., Project Contact Southwest District 3025 E. Kearney Street Springfield, MO 65803

Telephone Number: 417-895-7692 E-mail: <u>Donald.Saiko@modot.mo.gov</u>

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

F. <u>Supplemental Revisions</u> JSP-18-01D

Delete Sec 106.9 and substitute the following:

106.9 Buy America Requirement On all federal-aid projects, the contractor's attention is directed to Title 23 CFR 635.410 Buy America Requirements. Where steel or iron products are to be permanently incorporated into the contract work, steel and iron material shall be manufactured in the USA except for "minor usage" as described herein. Furthermore, any

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coating process of the steel or iron shall be performed in the USA. The use of pig iron and processed, pelletized and reduced iron ore manufactured outside of the USA will be permitted in the domestic manufacturing process for steel or iron material.

Delete Sec 106.9.3 and substitute the following:

106.9.3 Buy America requirements include a step certification for all fabrication processes of all steel or iron materials that are accepted per Sec 1000.

106.9.3.1 Items designated as Category 1 will consist of steel girders, piling, and reinforcing steel installed on site. Category 1 items require supporting documentation prior to incorporation into the project showing all steps of manufacturing, including coating, as being completed in the United States and in accordance with CFR Title 23 Section 635.410 Buy America Requirements. This includes the Mill Test Report from the original producing steel mill and certifications documenting the manufacturing process for all subsequent fabrication, including coatings. The certification shall include language that certifies the following. That all steel and iron materials permanently incorporated in this project was procured and processed domestically and all manufacturing processes, including coating, as being completed in the United States and in accordance with CFR Title 23 Section 635.410.

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

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

Delete Sec 106.9.4 and Renumber subsequent sections accordingly:

Delete Sec 616.5.1 and substitute the following:

616.5.1 Amber or Amber and White Warning Lights. All on-road construction-related vehicles and equipment shall operate with amber or amber and white warning lights having 360 degrees of total coverage and as follows:

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(1) For daytime operations, SAE Class 1 or 2 lights shall be used.

(2) For dusk to dawn operations, SAE Class 2 lights shall be used, or SAE Class 1 lights with dimming capabilities to minimize glare experienced by travelers.

- **616.5.1.1 Red or Red and Blue Warning Lights.** The contractor may elect to use red or red and blue warning lights in accordance with Missouri law and the following requirements:
 - (1) Use of red or red and blue lights shall be limited to use on a total of two vehicles per work zone and/or project.
 - (2) Use of red or red and blue warning lights shall be limited to areas in advance of tapers or lane shifts and at the active work location.
 - (3) Lights shall be SAE Class 2 or SAE Class 1 with dimming capabilities to minimize glare experienced by travelers.

The awarded contract will serve as a permit by the Commission, granting the prime contractor and approved sub-contractors to utilize red or red and blue lights as required by Missouri law.

G. Utilities JSP-93-26F

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

Utility Name

Known Required Adjustment

City Utilities of Willard David O'Connor P.O. Box 187 224 W. Jackson St. Willard, MO 65781 Phone: 417-844-4936

Email: Pwd@citywillard.org

Yes (See Section 1.0)

- **1.0 City Utilities of Willard** –In the section of Route Z between Jackson (Old Bus.160) and US 160 there are (9) nine existing manholes and (1) one lamp hole along the east edge of pavement, all will need to be raised/lowered to meet final grade. Contractor shall contact Public Works Director of Willard David O'Connor @ 417-844-4936 (30) thirty days prior to NTP to coordinate locations and identify each of the (9) nine manholes and (1) one lamp hole lids that will need to be raised/lowered to meet final grade. It is the contractor's responsibility to coordinate, locate and protect all the sewer facilities during all phases of construction.
- **2.0** The existence and approximate location of utility facilities known to exist, as shown on the plans, are based upon the best information available to the Commission at this time. This information is provided by the Commission "as-is" and the Commission expressly disclaims any representation or warranty as to the completeness, accuracy, or suitability of the information for

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

H. <u>Contractor Quality Control</u> 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).
- **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.

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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.

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I. Liquidated Damages for Winter Months JSP-04-17

1.0 Description. Revise Sec 108.8.1.3 (a) and (b) and substitute the following for the project:

- (a) Liquidated damages will be assessed from December 15 to March 15
- (b) Liquidated damages will be assessed for Saturdays, Sundays and Holidays.
- J. Pavement Marking Log SW
- **1.0 Description.** This work shall consist of the Contractor documenting the location of all existing pavement markings prior to coldmilling or resurfacing and installing new pavement markings to match the scheme that was in place prior to the project.
- **2.0 Construction Requirements.** Prior to the start of resurfacing work, the Contractor shall document the color, type, and location of the existing pavement markings, including any change in pavement marking (e.g., solid yellow to intermittent yellow on the centerline) and no passing zones. The Contractor shall submit the method of documentation to the Engineer for approval prior to recording the existing pavement marking information.
- **2.1** The existing pavement marking documentation provided by the Contractor shall include the location of existing pavement markings by either station or log mile. The Engineer shall reserve the right to make adjustments to the final pavement marking locations. The Engineer will provide the Contractor with any adjusted locations. Under no circumstances shall the Contractor make adjustments to the location of permanent pavement markings without the Engineer's approval.
- 2.2 All permanent pavement markings shall be installed in accordance with Sec 620.
- **3.0. Temporary Pavement Marking.** The Contractor shall provide temporary pavement marking in accordance with Sec 620 and Standard Plan 620.10. No compensation will be made to the Contractor for temporary pavement marking.
- **4.0 Method of Measurement.** Measurement will be made in accordance with Sec 620.
- **5.0 Basis of Payment.** No direct compensation will be made to the Contractor for compliance with this provision. All costs associated with the equipment, labor, materials, and time necessary to fulfill the requirements of this provision shall be considered completely covered by the pavement marking (Sec 620) line items in the contract.

K. Permanent Pavement Marking - SW

- **1.0 Description.** This work shall consist of furnishing and placing preformed pavement marking tape, as specified, at locations shown on the plans or as approved by the engineer. This includes, but not limited to, 24" White (Stop Bars) and 24" Yellow (Hash Mark), 6" White for Crosswalks, Turn Arrows, Railroad Crossings, Yield Markings, and the word "ONLY". This work shall be in accordance with Section 620 and specifically as follows.
- **2.0 Construction Requirements.** The contractor shall place the preformed pavement marking tape <u>after</u> the permanent centerline, edge line, and lane line marking is installed by the

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contractor or by others. The contractor will have 5 five days after the permanent centerline, edge line, and lane line markings are placed to start the preformed pavement marking tape installation and shall be placed in accordance with manufacturer's recommendations or as approved by the engineer.

- **2.1** In addition, on roadways open to traffic, permanent centerline, edge line, and lane line markings shall be in place no later than five days after the final paving operations. This requirement applies per individual route if multiple routes are included in a contract or if a 15 mile section of an individual route is open to traffic within a contract. To fulfill this requirement, the contractor may have to mobilize in more than once for the installation of permanent centerline, edge line, and lane line markings. The contractor will also need to coordinate the permanent marking with the installation of rumble strips.
- **3.0 Basis of Payment.** The accepted quantity of preformed pavement marking tape will be paid for at the contract unit price for each of the pay items include in the contract. Payment will be considered full compensation for all labor, equipment, material or time necessary to complete the described work including any other incidental items.

L. Cooperation Between Contractors - SW

- **1.0** This contract is one of two projects essential to the overall improvements along Route Z in Willard. Resurfacing improvements, project J8S3083, will be constructed along Route Z from Farm Road 60 to Route 160. Resurfacing improvements will be constructed concurrently with the ADA improvements. ADA improvements, project J8S3078, will be constructed along Route Z (Farmer Road) from the Willard Recreation Center to Route 160.
- **2.0** The final locations of some of the crosswalk lines along Route Z will not be known until the ADA improvements are constructed at these locations. The resurfacing contractor shall install temporary crosswalk lines at these locations, and shall maintain the temporary markings until permanent markings are installed or as directed by the engineer. The ADA contractor shall coordinate with the resurfacing contractor to ensure that the permanent pavement marking locations will be compatible with the proposed ADA improvements.
- **3.0** When necessary for proper prosecution of work, each contractor shall permit the other access through the overlapping construction areas and the use of any access or haul roads constructed by others.
- **4.0 Basis of Payment.** The accepted quantity of temporary crosswalk lines will be paid for at the contract unit price 620-99.03, Misc. Preformed Removable Marking Tape, 6 in. White.

M. Flagging Procedure for Two-Lane Roadways (3-2-1 Cone Procedure) NJSP-17-03A

- **1.0 Description.** Flagging operations shall be in accordance with the Manual on Uniform Traffic Control Devices (MUTCD) Chapter 6, Section 107 and 616 in Missouri Standard Specifications for Highway Construction, Missouri Standard Plans for Highway Construction, temporary traffic control plans, and as described herein.
- **2.0 Procedures for Flagging Short, Intermediate, or Long-Term Stationary Operations.** This procedure includes the use of three traffic cones or other channelizing devices.

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2.1 Step 1. The flagger shall place three cones across the lane of traffic to be stopped, from centerline to shoulder. When no vehicles are present, the flagger should remain on the shoulder with the stop paddle visible.

- **2.2 Step 2.** When traffic has stopped, the flagger shall move towards the centerline of the roadway, keeping the stop paddle visible, and keeping a visual contact with the stopped drivers. Once the flagger has confirmed that opposing traffic is clear, the flagger shall prepare to release the stopped traffic.
- **2.3 Step 3a.** If the vehicles are to travel in the current lane, the flagger shall remove the center cone from the center of the lane.
- **2.4 Step 3b.** If the vehicles are to travel in the opposite lane, the three cones shall remain across the closed lane.
- **2.5 Step 4.** If opening the lane (Step 3a above) the flagger shall walk back to the shoulder with the cone, turn the stop paddle to slow, and then release traffic using a hand signal to direct vehicles between the two remaining cones. If releasing traffic to the other lane (Step 3b above) the flagger shall remain near the centerline of the roadway, turn the stop paddle to slow, and use a hand signal to direct the traffic around the cones into the open lane.
- **2.6** Once all traffic has cleared, the flagger shall return the slow paddle to stop. The flagger shall replace the cone to the center of the lane or leave the cones across the lane. The flagger then returns to the shoulder and repeats the steps.
- **2.7** If the roadway width is less than 12 feet, the number of cones may be reduced to two or one, or other channelizing devices may be used.
- **3.0 Basis of Payment.** No direct payment will be made for any cost associated with this provision.

<u>Pictorial Representation of Steps for Flagging Procedure for Two-Lane Roadways (3-2-1 Cone Procedure)</u>

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STEP 1 STEP 2





STEP 3 STEP 4

N. <u>Temporary Short-Term Rumble Strips</u> JSP-13-05E

1.0 Description. The work shall include furnishing, installing, maintaining, removing, and relocating the short-term rumble strips, as shown in the plans, or as designated by the engineer.

2.0 Material.

- **2.1** The short-term rumble strips shall be 10 to 12 feet in length, minimum of 8 inches wide, $\frac{3}{4}$ to $\frac{1}{4}$ inch thick, fabricated from a polymer material, and orange in color.
- **2.2** The short term-rumble strips shall not curl or deform across the width of the strip, maintaining its rigidity.

3.0 Construction.

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3.1 Each set shall consist of three individual strips spanning a single lane, spaced in accordance with the plans or as directed by the engineer. The short-term rumble strips shall be installed and removed in accordance with manufacturer's recommendation.

- **3.2** The contractor shall monitor, maintain alignment, and repair if needed the short-term rumble strips during construction. Short-term rumble strips shall not be placed on roadways when there are no workers present.
- **3.3** Strips shall not extend onto the shoulder without the approval of the Engineer.
- **4.0 Method of Measurement.** Measurement of short-term rumble strips will be based per each set.
- **5.0 Basis of Payment.** The accepted quantity of Temporary Short-Term Rumble Strips sets will be paid for at the contract unit price for 616-20.04, Temporary Short-Term Rumble Strips, per each set. The short-term rumble strips unit bid price shall include the cost of all labor, equipment and materials to install, maintain, remove and relocate the rumble strips during the construction of the project.

O. Plant Mix Bituminous Pavement Aggregate Requirement (BP-2)

1.0 Description. In addition to the requirements of Sec 401.3, the total aggregate prior to mixing with asphalt binder shall be in accordance with the following gradation requirements:

Sieve Size	Percent Passing by Weight
	BP-2
1 inch	100
3/4 inch	100
1/2 inch	100
3/8 inch	90-100
No. 4	60-90
No. 8	40-70
No. 16	
No. 30	15-35
No. 200	5-12

P. Permanent Aggregate Edge Treatment - SW

- **1.0 Description**. This work shall consist of furnishing and placing aggregate material on the shoulders of the resurfaced route in areas indicated in the plans. This work and material shall be in accordance with Section 310 except as follows.
- **2.0 Construction Requirements.** The contractor shall furnish, haul and spread aggregate material to bring the shoulders up to match the overlaid pavement elevation as shown in the typical sections.
- **2.1** Aggregate material for the permanent aggregate edge treatment shall be a 1" commercial base. Any material shall be approved by engineer prior to use.

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2.2 Aggregate shall be simultaneously deposited and spread on the sub-grade and shall not be deposited on the pavement or shoulder and bladed into place without prior approval from the engineer. Aggregate material shall be shaped according to the typical section and compacted until there is no visible evidence of further consolidation.

- **2.3** Density shall be obtained from reasonable compactive efforts consisting of no less than three passes with a roller until no further visible compaction can be achieved, or by other methods approved by the engineer.
- **2.4** After all placing, shaping, and compactive effort operations are completed, a tack coat in accordance with Section 407, shall be placed on all aggregate edge treatment at a target rate of 0.25Gal/SY.
- **3.0 Method of Measurement.** Measurement of material furnished for shoulder aggregate shall be per ton and in accordance with Section 310.5.3. Measurement for all tack will be in accordance with Section 407.5.
- **4.0 Basis of Payment.** The accepted quantities of permanent aggregate edge treatment will be paid for at the contract unit price for PERMANENT AGGREGATE EDGE TREATMENT, pay item 304-99.10, including all labor, equipment, and material costs required to fulfill the requirements of the special provision.

Q. Culvert Location - SW

- **1.0 Description.** This work shall consist of the Contractor documenting the location of all existing crossroad culverts prior to conducting grading operations or placement of permanent aggregate edge treatment.
- **2.0 Construction Requirements.** Prior to the start of grading or edge treatment work, the Contractor shall document the location of the existing crossroad culverts. The Contractor shall submit the method of documentation to the Engineer for approval prior to recording the existing culvert location.
- **2.1** The documentation provided by the Contractor shall include the location of existing crossroad culverts by either station or log mile. Under no circumstances shall the Contractor begin grading or edge treatment work without the Engineer's approval.
- **2.2** The location of each crossroad culvert shall be indicated with a lathe or other identifier that can be seen during contractor operations.
- **2.3** The contractor shall exercise reasonable care in the locations of the crossroad culverts <u>and</u> all driveway culverts to ensure that grading or edge treatment operations do not result in the blockage of the culvert.
- **2.4** The contractor as directed by the engineer shall remove any material from all culverts that was placed by grading or edge treatment operations.
- **3.0 Basis of Payment.** No direct compensation will be made to the Contractor for compliance with this provision. All costs associated with the equipment, labor, materials, and time necessary

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to fulfill the requirements of this provision shall be considered completely covered by the grading (Sec 212) line items in the contract.

R. <u>Contractor Furnished Surveying and Staking</u> - SW

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

- **1.0 Description**. The contractor shall be responsible for all layout required on the project. This responsibility shall include, but not be limited to the following: Construction signing, transition milling, pavement marking, loop detectors, etc.
- **1.1** The above list is not all inclusive. The contractor shall have the primary responsibility for these operations. The contractor shall provide the Resident Engineer with a staking plan layout for approval prior to the installation of signs. The RE will also provide assistance during this layout provided a request is submitted to the RE or Construction Project Manager 48 hours in advance. This will ensure that all permanently mounted traffic control devices remain consistent with District policy and avoid re-staking. If the contractor installs any signs without engineer approval, all costs associated with re-staking and/or relocation will be at the contractor's expense.
- **1.2** The intent of this provision is to increase the quality of our work zones and minimize negative impacts to the contractor's schedule that can result from delays in staking.
- **1.3** Any adjustments to the plan quantities or line numbers established in the contract shall be approved by the Engineer.
- **2.0 Basis of Payment.** No direct payment will be made to cover the costs associated with these additional requirements. All costs will be considered completely covered by the unit bid price submitted for Contractor Furnished Surveying and Staking.
- S. Damage to Existing Pavement, Shoulders, Side roads, and Entrances SW
- **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 is not 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 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 pavement, shoulders, side roads, or entrances shall be as determined by the engineer.
- **3.0 Method of Measurement.** No measurement of damaged pavement or shoulder areas or damaged 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 expenses.

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T. <u>Access to Commercial Properties</u> - SW

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

- **1.1** The contractor shall contact each business to advise them of the work that will take place before working around each business entrance. In some cases where a property has more than one entrance, the property owner may have a preference on whether to have one entrance closed while working around it or whether to have the entrances worked around one-half at a time. The contractor is required to do the work according to each individual property owner's preference. The contractor is not to disturb any existing trees, landscaping, small block walls or irrigation lines. The contractor will solely be responsible for repairing any damage to the property caused by contractor operations.
- **2.0** Basis of Payment. No direct payment will be made to the contractor for all costs incurred with compliance of this provision.

U. Gravel A or Crushed Stone B - SW

- **1.0 Description**. This work shall consist of furnishing and placing gravel or crushed stone surfacing for transitions at aggregate side roads and entrances upon completion of overlay and shoulder work. This work and material shall be in accordance with Section 310 except as follows.
- **2.0 Construction Requirements.** The contractor shall furnish, haul and spread gravel or crushed stone surfacing to smooth up the transitions and eliminate any edge drop offs created at aggregate side roads and entrances created from the construction of shoulders as approved by the engineer.
- **3.0 Method of Measurement.** Measurement of material furnished for gravel or crushed stone will be made in accordance with Section 310.5.3, excluding any deductions for moisture.
- **4.0 Basis of Payment.** The accepted quantities of gravel or crushed stone will be paid for at the contract unit price, including all labor, equipment, and material costs required to fulfill the requirements of the special provision.

V. Disposition of Existing Signing JSP-12-01A

1.0 Description. All signing indicated for removal in the plans, shall be covered by the contractor and delivered to the following location. The contractor shall call the phone number listed below 48 hours prior to delivery and make arrangements for the delivery.

Republic Maintenance Lot Nick Capra, Maintenance Supervisor 1925 S State Hwy N Springfield, MO 65802

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Phone: 417-732-2531

2.0 The contractor shall exercise reasonable care in the handling of the signs during the removal and transportation. Should any of the signs be damaged by the contractor's negligence, it shall be replaced at the contractor's expense.

3.0 Basis of Payment. Payment for removal and transportation of these signs, as shown in the plans, shall be considered as and completely covered by the contract unit price for Item No. 202-20.10, "Removal of Improvements", per lump sum.