#### HIGHWAY WORK PROPOSAL

Wisconsin Department of Transportation 06/2017 s.66.0901(7) Wis. Stats

Notice of Award Dated

Proposal Number: 029

COUNTY STATE PROJECT **FEDERAL** PROJECT DESCRIPTION **HIGHWAY** Eau Claire 3700-50-29 N/A Nwregion, Var Sqnlized Intersections: **VAR HWY** Var Hwy & Location/Sgnl Head Per Ln St Croix Eau Claire 3700-50-38 N/A C Eau Claire, Clairemont Avenue; Keith USH 012 Street To Bus 53/Hastings Way

This proposal, submitted by the undersigned bidder to the Wisconsin Department of Transportation, is in accordance with the advertised request for proposals. The bidder is to furnish and deliver all materials, and to perform all work for the improvement of the designated project in the time specified, in accordance with the appended Proposal Requirements and Conditions.

Proposal Guaranty Required: \$40,000.00 Attach Proposal Guaranty on back of this PAGE. Payable to: Wisconsin Department of Transportation Firm Name, Address, City, State, Zip Code Bid Submittal Date: December 11, 2018 SAMPLE Time (Local Time): 9:00 am NOT FOR BIDDING PURPOSES Contract Completion Time June 28, 2019 This contract is exempt from federal oversight. Assigned Disadvantaged Business Enterprise Goal 0%

This certifies that the undersigned bidder, duly sworn, is an authorized representative of the firm named above; that the bidder has examined and carefully prepared the bid from the plans, Highway Work Proposal, and all addenda, and has checked the same in detail before submitting this proposal or bid; and that the bidder or agents, officer, or employees have not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with this proposal bid.

this proposal bid.

Do not sign, notarize, or submit this Highway Work Proposal when submitting an electronic bid on the Internet.

Subscribed and sworn to before me this date \_\_\_\_\_\_

(Signature, Notary Public, State of Wisconsin)

(Print or Type Name, Notary Public, State Wisconsin)

(Print or Type Bidder Name)

(Date Commission Expires)

(Bidder Title)

Notary Seal

Type of Work: For Department Use Only

Monotube traffic signal poles, installation of ITS devices and communication connections, MGS guardrail, permanent signing, and traffic control.

Date Guaranty Returned

## PLEASE ATTACH PROPOSAL GUARANTY HERE

## **Effective with November 2007 Letting**

## PROPOSAL REQUIREMENTS AND CONDITIONS

The bidder, signing and submitting this proposal, agrees and declares as a condition thereof, to be bound by the following conditions and requirements.

If the bidder has a corporate relationship with the proposal design engineering company, the bidder declares that it did not obtain any facts, data, or other information related to this proposal from the design engineering company that was not available to all bidders.

The bidder declares that they have carefully examined the site of, and the proposal, plans, specifications and contract forms for the work contemplated, and it is assumed that the bidder has investigated and is satisfied as to the conditions to be encountered, as to the character, quality, and quantities of work to be performed and materials to be furnished, and as to the requirements of the specifications, special provisions and contract. It is mutually agreed that submission of a proposal shall be considered conclusive evidence that the bidder has made such examination.

The bidder submits herewith a proposal guaranty in proper form and amount payable to the party as designated in the advertisement inviting proposals, to be retained by and become the property of the owner of the work in the event the undersigned shall fail to execute the contract and contract bond and return the same to the office of the engineer within fourteen (14) days after having been notified in writing to do so; otherwise to be returned.

The bidder declares that they understand that the estimate of quantities in the attached schedule is approximate only and that the attached quantities may be greater or less in accordance with the specifications.

The bidder agrees to perform the said work, for and in consideration of the payment of the amount becoming due on account of work performed, according to the unit prices bid in the following schedule, and to accept such amounts in full payment of said work.

The bidder declares that all of the said work will be performed at their own proper cost and expense, that they will furnish all necessary materials, labor, tools, machinery, apparatus, and other means of construction in the manner provided in the applicable specifications and the approved plans for the work together with all standard and special designs that may be designed on such plans, and the special provisions in the contract of which this proposal will become a part, if and when accepted. The bidder further agrees that the applicable specifications and all plans and working drawings are made a part hereof, as fully and completely as if attached hereto.

The bidder, if awarded the contract, agrees to begin the work not later than ten (10) days after the date of written notification from the engineer to do so, unless otherwise stipulated in the special provisions.

The bidder declares that if they are awarded the contract, they will execute the contract agreement and begin and complete the work within the time named herein, and they will file a good and sufficient surety bond for the amount of the contract for performance and also for the full amount of the contract for payment.

The bidder, if awarded the contract, shall pay all claims as required by Section 779.14, Statutes of Wisconsin, and shall be subject to and discharge all liabilities for injuries pursuant to Chapter 102 of the Statutes of Wisconsin, and all acts amendatory thereto. They shall further be responsible for any damages to property or injury to persons occurring through their own negligence or that of their employees or agents, incident to the performance of work under this contract, pursuant to the Standard Specifications for Road and Bridge Construction applicable to this contract.

In connection with the performance of work under this contract, the contractor agrees to comply with all applicable state and federal statutes relating to non-discrimination in employment. No otherwise qualified person shall be excluded from employment or otherwise be subject to discrimination in employment in any manner on the basis of age, race, religion, color, gender, national origin or ancestry, disability, arrest or conviction record (in keeping with s.111.32), sexual orientation, marital status, membership in the military reserve, honesty testing, genetic testing, and outside use of lawful products. This provision shall include, but not be limited to the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation, and selection for training, including apprenticeship. The contractor further agrees to ensure equal opportunity in employment to all applicants and employees and to take affirmative action to attain a representative workforce.

The contractor agrees to post notices and posters setting forth the provisions of the nondiscrimination clause, in a conspicuous and easily accessible place, available for employees and applicants for employment.

If a state public official (section 19.42, Stats.) or an organization in which a state public official holds at least a 10% interest is a party to this agreement, this contract is voidable by the state unless appropriate disclosure is made to the State of Wisconsin Ethics Board.

## **Effective with August 2015 Letting**

## BID PREPARATION

## Preparing the Proposal Schedule of Items

#### A General

- (1) Obtain bidding proposals as specified in section 102 of the standard specifications prior to 11:45 AM of the last business day preceding the letting. Submit bidding proposals using one of the following methods:
  - 1. Electronic bid on theinternet.
  - 2. Electronic bid on a printout with accompanying diskette or CD ROM.
  - 3. Paper bid under a waiver of the electronic submittal requirements.
- (2) Bids submitted on a printout with accompanying diskette or CD ROM or paper bids submitted under a waiver of the electronic submittal requirements govern over bids submitted on the internet.
- (3) The department will provide bidding information through the department's web site at: <a href="https://wisconsindot.gov/Pages/doing-bus/contractors/hcci/bid-let.aspx">https://wisconsindot.gov/Pages/doing-bus/contractors/hcci/bid-let.aspx</a>

The contractor is responsible for reviewing this web site for general notices as well as information regarding proposals in each letting. The department will also post special notices of all addenda to each proposal through this web site no later than 4:00 PM local time on the Thursday before the letting. Check the department's web site after 5:00 PM local time on the Thursday before the letting to ensure all addenda have been accounted for before preparing the bid. When bidding using methods 1 and 2 above, check the Bid Express<sup>TM</sup> on-line bidding exchange at <a href="http://www.bidx.com/">http://www.bidx.com/</a> after 5:00 PM local time on the Thursday before the letting to ensure that the latest schedule of items Expedite file (\*.ebs or \*.00x) is used to submit the final bid.

(4) Interested parties can subscribe to the Bid Express<sup>TM</sup> on-line bidding exchange by following the instructions provided at the www.bidx.com web site or by contacting:

Info Tech Inc. 5700 SW 34th Street, Suite 1235 Gainesville, FL 32608-5371 email: mailto:customer.support@bidx.com

- (5) The department will address equipment and process failures, if the bidder can demonstrate that those failures were beyond their control.
- (6) Contractors are responsible for checking on the issuance of addenda and for obtaining the addenda. Notice of issuance of addenda is posted on the department's web site at:

  <a href="https://wisconsindot.gov/Pages/doing-bus/contractors/hcci/bid-let.aspx">https://wisconsindot.gov/Pages/doing-bus/contractors/hcci/bid-let.aspx</a>

or by calling the department at (608) 266-1631. Addenda can ONLY be obtained from the departments web site listed above or by picking up the addenda at the Bureau of Highway Construction, 4<sup>th</sup> floor, 4822 Madison Yards Way, Madison, WI, during regular business hours

(7) Addenda posted after 5:00 PM on the Thursday before the letting will be emailed to the eligible bidders for that proposal. All eligible bidders shall acknowledge receipt of the addenda whether they are bidding on the proposal or not. Not acknowledging receipt may jeopardize the awarding of the project.

#### **B Submitting Electronic Bids**

## **B.1** On the Internet

- (1) Do the following before submitting the bid:
  - 1. Have a properly executed annual bid bond on file with the department.

- 2. Have a digital ID on file with and enabled by Info Tech Inc. Using this digital ID will constitute the bidder's signature for proper execution of the bidding proposal.
- (2) In lieu of preparing, delivering, and submitting the proposal as specified in 102.6 and 102.9 of the standard specifications, submit the proposal on the internet as follows:
  - 1. Download the latest schedule of items reflecting all addenda from the Bid Express TM web site.
  - 2. Use Expedite TM software to enter a unit price for every item in the schedule of items.
  - 3. Submit the bid according to the requirements of Expedite<sup>TM</sup> software and the Bid Express<sup>TM</sup> web site. Do not submit a bid on a printout with accompanying diskette or CD ROM or a paper bid. If the bidder does submit a bid on a printout with accompanying diskette or a paper bid in addition to the internet submittal, the department will disregard the internet bid.
  - 4. Submit the bid before the hour and date the Notice to Contractors designates.
  - Do not sign, notarize, and return the bidding proposal described in 102.2 of the standard specifications.
- (3) The department will not consider the bid accepted until the hour and date the Notice to Contractors designates.

## B.2 On a Printout with Accompanying Diskette or CD ROM

(1) Download the latest schedule of items from the Wisconsin pages of the Bid Express<sup>TM</sup> web site reflecting the latest addenda posted on the department's web site at:

https://wisconsindot.gov/Pages/doing-bus/contractors/hcci/bid-let.aspx

Use Expedite TM software to prepare and print the schedule of items. Provide a valid amount for all price fields. Follow instructions and review the help screens provided on the Bid Express Web site to assure that the schedule of items is prepared properly.

(2) Staple an 8 1/2 by 11 inch printout of the Expedite<sup>TM</sup> generated schedule of items to the other proposal documents submitted to the department as a part of the bidder's sealed bid. As a separate submittal, not in the sealed bid envelop but due at the same time and place as the sealed bid, also provide the Expedite<sup>TM</sup> generated schedule of items on a 3 1/2 inch computer diskette or CD ROM. Label each diskette or CD ROMwith the bidder's name, the 4 character department-assigned bidder identification code from the top of the bidding proposal, and a list of the proposal numbers included on that diskette or CD ROM as indicated in the following example:

**Bidder Name** 

**BN00** 

Proposals: 1, 12, 14, & 22

- (3) If bidding on more than one proposal in the letting, the bidder may include all proposals for that letting on one diskette or CD ROM. Include only submitted proposals with no incomplete or other files on the diskette or CD ROM.
- (4) The bidder-submitted printout of the Expedite<sup>TM</sup> generated schedule of items is the governing contract document and must conform to the requirements of section 102 of the standard specifications. If a printout needs to be altered, cross out the printed information with ink or typewriter and enter the new information and initial it in ink. If there is a discrepancy between the printout and the diskette or CD ROM, the department will analyze the bid using the printout information.
- (5) In addition to the reasons specified in section 102 of the standard specifications, proposals are irregular and the department may reject them for one or more of the following:
  - 1. The check code printed on the bottom of the printout of the Expedite<sup>TM</sup> generated schedule of items is not the same on each page.
  - 2. The check code printed on the printout of the Expedite<sup>TM</sup> generated schedule of items is not the same as the check code for that proposal provided on the diskette or CD ROM.

3. The diskette or CD ROM is not submitted at the time and place the department designates.

#### C Waiver of Electronic Submittal

- (1) The bidder may request a waiver of the electronic submittal requirements. Submit a written request for a waiver in lieu of bids submitted on the internet or on a printout with accompanying diskette or CD ROM. Use the waiver that was included with the paper bid document sent to the bidder or type up a waiver on the bidder's letterhead. The department will waive the electronic submittal requirements for a bidding entity (individual, partnership, joint venture, corporation, or limited liability company) for up to 4 individual proposals in a calendar year. The department may allow additional waivers for equipment malfunctions.
- (2) Submit a schedule of items on paper conforming to section 102 of the standard specifications. The department charges the bidder a \$75 administrative fee per proposal, payable at the time and place the department designates for receiving bids, to cover the costs of data entry. The department will accept a check or money order payable to: "Wisconsin, Dept. of Transportation."
- (3) In addition to the reasons specified in section 102 of the standard specifications, proposals are irregular and the department may reject them for one or more of the following:
  - 1. The bidder fails to provide the written request for waiver of the electronic submittal requirements.
  - 2. The bidder fails to pay the \$75 administrative fee before the time the department designates for the opening of bids unless the bidder requests on the waiver that they be billed for the \$75.
  - 3. The bidder exceeds 4 waivers of electronic submittal requirements within a calendar year.
- (4) In addition to the reasons specified in section 102 of the standard specifications, the department may refuse to issue bidding proposals for future contracts to a bidding entity that owes the department administrative fees for a waiver of electronic submittal requirements.

## PROPOSAL BID BOND

DT1303 1/2006

Wisconsin Department of Transportation

Proposal Number	Project Number		Letting Date
Name of Principal			
Name of Surety		State in Which Surety is	Organized

We, the above-named Principal and the above-named Surety, are held and firmly bound unto the State of Wisconsin in the sum equal to the Proposal Guaranty for the total bid submitted for the payment to be made; we jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns. The condition of this obligation is that the Principal has submitted a bid proposal to the State of Wisconsin acting through the Department of Transportation for the improvement designated by the Proposal Number and Letting Date indicated above.

If the Principal is awarded the contract and, within the time and manner required by law after the prescribed forms are presented for signature, enters into a written contract in accordance with the bid, and files the bond with the Department of Transportation to guarantee faithful performance and payment for labor and materials, as required by law, or if the Department of Transportation shall reject all bids for the work described, then this obligation shall be null and void; otherwise, it shall be and remain in full force and effect. In the event of failure of the Principal to enter into the contract or give the specified bond, the Principal shall pay to the Department of Transportation within 10 business days of demand a total equal to the Proposal Guaranty as liquidated damages; the liability of the Surety continues for the full amount of the obligation as stated until the obligation is paid in full.

The Surety, for value received, agrees that the obligations of it and its bond shall not be impaired or affected by any extension of time within which the Department of Transportation may accept the bid; and the Surety does waive notice of any such extension.

IN WITNESS, the Principal and Surety have agreed and have signed by their proper officers and have caused their corporate seals to be affixed this date: **(DATE MUST BE ENTERED)** 

#### **PRINCIPAL**

(Company Name) (Affix C	orporate Seal)			
(Signature and Title)				
(Company Name)				
(Signature and Title)				
(Company Name)				
(Signature and Title)		(Name of Surety) (Affix Seal)		
(Company Name)		(Signature of Attorney-in-Fact)		
(Signature and Title)				
NOTARY FOR PRINCIPAL		NOTARY FOR SURETY		
	(Date)	(Date)	)	
State of Wisconsin	)	State of Wisconsin	)	
	) ss. County )	(	) ss. County )	
On the above date, this instrument was acknowledged before me by the named person(s).		On the above date, this instrument was named person(s).	acknowledged before me by the	
(Signature, Note	ary Public, State of Wisconsin)	(Signature, Notary Public,	State of Wisconsin)	
(Print or Type Name	, Notary Public, State of Wisconsin)	(Print or Type Name, Notary Po	ublic, State of Wisconsin)	
(Date	Commission Expires)	(Date Commission	on Expires)	

Notary Seal Notary Seal

IMPORTANT: A certified copy of Power of Attorney of the signatory agent must be attached to the bid bond.

## **CERTIFICATE OF ANNUAL BID BOND**

DT1305 8/2003

Wisconsin Department of Transportation

Time Period Valid (	(From/To)
Name of Surety	
Name of Contracto	ır
Certificate Holder	Wisconsin Department of Transportation
	y that an annual bid bond issued by the above-named Surety is currently on file with the partment of Transportation.
	is issued as a matter of information and conveys no rights upon the certificate holder amend, extend or alter the coverage of the annual bid bond.
Cancellation:	Should the above policy be cancelled before the expiration date, the issuing surety will give thirty (30) days written notice to the certificate holder indicated above.
	(Signature of Authorized Contractor Representative) (Date

## March 2010

## LIST OF SUBCONTRACTORS

Section 66.0901(7), Wisconsin Statutes, provides that as a part of the proposal, the bidder also shall submit a list of the subcontractors the bidder proposes to contract with and the class of work to be performed by each. In order to qualify for inclusion in the bidder's list a subcontractor shall first submit a bid in writing, to the general contractor at least 48 hours prior to the time of the bid closing. The list may not be added to or altered without the written consent of the municipality. A proposal of a bidder is not invalid if any subcontractor and the class of work to be performed by the subcontractor has been omitted from a proposal; the omission shall be considered inadvertent or the bidder will perform the work personally.

No subcontract, whether listed herein or later proposed, may be entered into without the written consent of the Engineer as provided in Subsection 108.1 of the Standard Specifications.

Name of Subcontractor	Class of Work	<b>Estimated Value</b>
-		

#### **DECEMBER 2000**

## CERTIFICATION REGARDING DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS - PRIMARY COVERED TRANSACTIONS

## **Instructions for Certification**

- 1. By signing and submitting this proposal, the prospective contractor is providing the certification set out below.
- 2. The inability of a person to provide the certification required below will not necessarily result in denial of participation in this covered transaction. The prospective contractor shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective contractor to furnish a certification or an explanation shall disqualify such person from participation in this transaction.
- 3. The certification in this clause is a material representation of fact upon which reliance was placed when the department determined to enter into this transaction. If it is later determined that the contractor knowingly rendered an erroneous certification in addition to other remedies available to the Federal Government the department may terminate this transaction for cause or default.
- 4. The prospective contractor shall provide immediate written notice to the department to whom this proposal is submitted if at any time the prospective contractor learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- 5. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of the rules implementing Executive Order 12549. You may contact the department to which this proposal is being submitted for assistance in obtaining a copy of those regulations.
- 6. The prospective contractor agrees by submitting this proposal that, should this contract be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department entering into this transaction.
- 7. The prospective contractor further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," which is included as an addendum to PR-1273 "Required Contract Provisions Federal Aid Construction Contracts," without

modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

- 8. The contractor may rely upon a certification of a prospective subcontractor/materials supplier that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A contractor may decide the method and frequency by which it determines the eligibility of its principals. Each contractor may, but is not required to, check the Disapproval List (telephone # 608/266/1631).
- 9. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a contractor is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- 10. Except for transactions authorized under paragraph 6 of these instructions, if a contractor in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department may terminate this transaction for cause or default.

Certification Regarding Debarment, Suspension, and Other Responsibility Matters - Primary Covered Transactions

- (1) The prospective contractor certifies to the best of its knowledge and belief, that it and its principals:
  - (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
  - (b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements or receiving stolen property;
  - (c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offense enumerated in paragraph (1)(b) of this certification; and
  - (d) Have not within a three-year period preceding this proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- (2) Where the prospective contractor is unable to certify to any of the statements in this certification, such prospective contractor shall attach an explanation to this proposal.

## **Special Provisions**

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# STSP'S Revised June 28, 2018 SPECIAL PROVISIONS

#### 1. General.

Perform the work under this construction contract for Project 3700-50-29, NW Region, Var Signalized Intersections, Var Hwy & Locations, Signal Head per Lane, Eau Claire and St. Croix Counties, Wisconsin; Project 3700-50-38, C Eau Claire, Clairemont Avenue, Keith Street to Bus 53/Hastings Way, USH 12, Eau Claire County, Wisconsin as the plans show and execute the work as specified in the State of Wisconsin, Department of Transportation, Standard Specifications for Highway and Structure Construction, 2019 Edition, as published by the department, and these special provisions.

If all or a portion of the plans and special provisions are developed in the SI metric system and the schedule of prices is developed in the US standard measure system, the department will pay for the work as bid in the US standard system.

100-005 (20180628)

## 2. Scope of Work.

The work under this contract shall consist of installation of monotube traffic signal poles, installation of ITS devices and communications, MGS guardrail, traffic control, and all incidental items necessary to complete the work as shown on the plans and included in the proposal and contract.

104-005 (20090901)

## 3. Prosecution and Progress.

Begin work within ten calendar days after the engineer issues a written notice to do so.

Provide the start date to the engineer in writing within a month after executing the contract but at least 14 calendar days before the preconstruction conference. Upon approval, the engineer will issue the notice to proceed within ten calendar days before the approved start date.

To revise the start date, submit a written request to the engineer at least two weeks before the intended start date. The engineer will approve or deny that request based on the conditions cited in the request and its effect on the department's scheduled resources.

## Project 3700-50-29:

Contractor shall confirm lengths of all monotube arms at each intersection location prior to order, including coordinating construction activities with a call to Diggers Hotline to locate exact install locations.

## Northern Long-eared Bat (Myotis septentrionalis)

Northern Long-eared Bats (NLEB) have the potential to inhabit the project limits because they roost in trees. Roosts may not have been observed on this project, but conditions to support the species exist. The species and all active roosts are protected by the Federal Endangered Species Act. If an individual bat or active roost is encountered during construction operations, stop work and notify the engineer and the WisDOT Regional Environmental Coordinator (REC).

If additional construction activities beyond what was originally specified are required to complete the work, approval from the engineer, following coordination with WisDOT REC, is required prior to initiating these activities.

#### 4. Traffic.

The following is a general overview of the traffic control and staging required throughout all stages of the project.

Accomplish the construction sequence, including the associated traffic control as detailed in the Traffic Control plan sheets and as described herein.

3700-50-29, 3700-50-38 2 of 20

Do not begin or continue any work that closes traffic lanes outside the allowed time periods specified in this article.

Construction traffic shall not exit the work zone between traffic control drums set for a lane closure.

A minimum of 15 feet clear width, existing 12 feet lane width + 3 feet shoulder width, must be maintained on USH 12, STH 64, STH 65, and STH 312.

## Traffic operations during all stages

Traffic shall be maintained on existing lanes throughout construction. Traffic Control shall be implemented based on WisDOT standard detail drawings.

For Project 3700-50-29, 15-minute directional full closures will be allowed for installation of monotube arms on USH 12, STH 64, STH 65, and STH 312 during overnight hours which are defined in the Traffic Restrictions detailed below. There will not be a posted detour for the full closures. Roadway users shall be informed of the closures with advance warning signage and portable changeable message signs.

For Project 3700-50-38 there will be single lane closures during the construction of the Dynamic Message Sign (DMS), including other associated guardrail and roadway work.

## Project 3700-50-29: Traffic Restrictions

- Work requiring full closures shall be completed between the hours of 11:00 PM to 5:00 AM.
- · Full closures will be allowed for 15 minute periods between the hours of 11:00 PM to 5:00 AM.
- Work requiring single lane closures shall be completed between the hours of 9:00 AM to 3:00 PM and 8:00 PM to 6:00 AM.
- Full closures along STH 312 are restricted to one intersection at a time.

## Project 3700-50-38: Traffic Restrictions

 Work requiring single lane closures shall be completed between the hours of 12:00 AM to 3:00 PM and 7:00 PM to 12:00 AM.

#### **Wisconsin Lane Closure System Advance Notification**

Provide the following advance notification to the engineer for incorporation into the Wisconsin Lane Closure System (LCS).

TABLE 108-1 CLOSURE TYPE AND REQUIRED MINIMUM ADVANCE NOTIFICATION

Closure type with height, weight, or width restrictions (available width, all lanes in one direction < 16')	MINIMUM NOTIFICATION
Lane and shoulder closures	7 calendar days
Full roadway closures	7 calendar days
Ramp closures	7 calendar days
Detours	7 calendar days
Closure type without height, weight, or width restrictions (available width, all lanes in one direction ≥16')	MINIMUM NOTIFICATION
Lane and shoulder closures	3 business days
Ramp closures	3 business days
Modifying all closure types	3 business days

Discuss LCS completion dates and provide changes in the schedule to the engineer at weekly project meetings in order to manage closures nearing their completion date.

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## 5. Timely Decision Making Manual.

Use the Timely Decision Making Manual (TDM) on this contract. Coordinate with the department to modify the various published tools as necessary to meet the particular project needs and determine how to implement those tools under the contract. Ensure the full participation of the contractor and its principal subcontractors throughout the term of the contract.

Forms and associated guidance are published in the TDM available at the department's Highway Construction Contract Information (HCCI) web site at:

https://wisconsindot.gov/rdwy/admin/tdm.doc

stp-105-005 (20151210)

## 6. Holiday Work Restrictions.

Do not perform work on, nor haul materials of any kind along or across any portion of the highway carrying USH 12, STH 64, STH 65, and STH 312 traffic, and entirely clear the traveled way and shoulders of such portions of the highway of equipment, barricades, signs, lights, and any other material that might impede the free flow of traffic during the following holiday periods:

- From noon Friday, May 24, 2019 to 6:00 AM Tuesday, May 28, 2019 for Memorial Day;
- From noon Wednesday, July 3, 2019 to 6:00 AM Monday, July 8, 2019 for Independence Day.

stp-107-005 (20050502)

#### 7. Utilities.

This contract comes under the provision of Administrative Rule Trans 220.

stp-107-065 (20080501)

Coordinate construction activities with a call to Diggers Hotline or a direct call to the utilities with underground facilities in the area, as required per state statutes. Use caution to maintain the integrity of utilities and maintain code clearances from overhead facilities at all times. Coordinate with the engineer to adjust plans as needed to avoid any unanticipated utility conflicts.

#### Project 3700-50-29

The following utility companies have facilities within the project area; however, no adjustments are anticipated:

- AT&T Wisconsin Communication Line
- Baldwin Telecom Communication Line
- CenturyLink Communications Communication Line
- · Charter Communications Communication Line
- · City of New Richmond Water
- · City of New Richmond Sanitary Sewer
- · City of New Richmond Electric Distribution
- Dairyland Power Cooperative Electric Transmission
- · Mosaic Telecom Communication Line
- West Wisconsin Telcom Co-op Communication Line
- Xcel Energy Electric Transmission
- · Xcel Energy Electric Distribution
- Xcel Energy Gas

## Project 3700-50-38

The following utility companies have facilities within the project area; however, no adjustments are anticipated:

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- AT&T Wisconsin Communication Line
- · CINC Communication Line
- · City of Eau Claire Water
- · City of Eau Claire Sanitary
- · City of Eau Claire Electric Distribution
- · Packerland Broadband Communication Line
- · Xcel Energy Electric Transmission
- · Xcel Energy Electric Distribution
- Xcel Energy Gas

## **Utility Company Field Contact Information**

## AT&T Wisconsin

Rick Podolak 304 South Dewey St., 4<sup>th</sup> Floor Eau Claire, WI 54701 (715) 839-5565 Office (715) 410-0656 Mobile rp4514@att.Com

#### Baldwin Telecom

Ken Carlsrud 930 Maple Street Baldwin, WI 54002 (715) 684-3346 Office (715) 760-0966 Mobile kcarlsrud@lswi.net

## CenturyLink Communications

Krik Thoelke
1111 Dorsett Rd.
Maryland Heights, MO 63043
(636) 887-4752 Office
(636) 887-4905 Fax
Kirk.Thoelke@CenturyLink.com

## Charter Communications

Shane Yoder 1201 McCann Drive Altoona, WI 54720 (715) 831-8940 Ext 51113 Office (715) 370-7870 Mobile Shane.Yoder@Charter.com

### o CINC

Daren Bauer 105 Garfield Avenue Eau Claire, WI 54701 (715) 836-5286 BauerDP@uwec.edu

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## City of Eau Claire

Lane Berg 910 Forest St. Eau Claire, WI 54703 (715) 839-1876 Office (715) 828-6801 Mobile Lane.Berg@EauClaireWI.gov

## City of New Richmond (Water & Sanitary Sewer)

Bob Meyer 156 East First Street New Richmond, WI 5401 (715) 243-0436 Water Shop (715) 246-4167 Utility Office NRUWater@NewRichmondWI.gov

## City of New Richmond (Electric Distribution)

Tom Rickard 156 East First Street New Richmond, WI 54017 (715) 243-0437 TRickard@NewRichmondWI.gov

## Dairyland Power Cooperative

Rob Maly 3200 East Avenue South PO Box 0817 La Crosse, WI 54602-0817 RobMaly@DairylandPower.com

#### Mosaic Telecom

Dennis Russett 401 S 1<sup>st</sup> Street PO Box 0664 Cameron, WI 54822-0664 (715) 458-5400 Office (715) 458-5518 Mobile ctcdennis@mosaictelecom.com

## o Packerland Broadband

Wayne Cretton 105 Kent St. PO Box 190 Iron Mountain, MI 49801 (906) 282-3768 Mobile (906) 774-6621 Mobile Wayne.Cretton@PackerlandBroadband.us

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## West Wisconsin Telcom Co-op

Brad Schmidtknecht 5808 Old Mill Plaza Eau Claire, WI 54703 (715) 231-0504 Office (715) 308-1914 Mobile Brads@wwt.coop

## Xcel Energy

Bruce Zemke
414 Nicollet Mall, 5<sup>th</sup> Floor
Minneapolis, MN 55401
(612) 330-7815
Bruce.M.Zemke@XcelEnergy.com

## 8. Notice to Contractor – Airport Operating Restrictions – Site Specific.

The Federal Aviation Administration (FAA) has height restrictions surrounding select airports. The department has obtained Temporary Determination of No Hazard to Air Navigation for erection of traffic signal poles at the following location. A copy of the determination can be obtained through the project engineer.

Project ID	Structure	Location	Latitude	Longitude	Heights	Issue Date	Expiration Date	Aeronautical Study No.
3700- 50-29	Traffic Signal Pole S-55-1009-01 S-55-1009-02 S-55-1009-03 S-55-1009-04	New Richmon d, WI (STH 64 & STH 65 Intersecti on)	45-08- 09 N NAD 83	92-32-02 W	20feet AGL 1014 feet AMSL	10/02/2018	04/02/2020	2018-AGL- 15303-OE

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed by the construction engineer any time the project is abandoned or within 5 days after the construction reaches its greatest height (7460-2, Part 2).

https://www.faa.gov/documentLibrary/media/Form/FAA\_Form\_7460-2\_2017.pdf

Marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 L Change 2.

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The determination expires 04/02/2020 unless:

- a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- b) extended, revised, or terminated by the issuing office.
- c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

Note: Request for extension of the effective period of this determination must be e-filed at least 15 days prior to the expiration date. After re-evaluation of current operations in the area of the structure to determine that no significant aeronautical changes have occurred, your determination may be eligible for one extension of the effective period.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

### 9. General Requirements for Electrical Work.

Add the following to standard spec 651.3.3 (3):

Electrical item inspections are required at the following times: after the staking of all electrical underground items, before the pouring of all lighting, signal, and cabinet bases; before cable and wire are pulled; during field terminations at signal and lighting bases; and prior to the installation of any poles, standards, or other above ground electrical items.

Request electrical inspections of the completed signal and lighting work to the engineer at least five working days prior to the time of the required inspection. Notify the Northwest Region – Eau Claire Office Electrical Field Unit at (715) 577-5399 to coordinate the inspection. The department's region electrical personnel will perform the inspection.

#### 10. Fence Safety, Item 616.0700.S.

#### A Description

This special provision describes providing plastic fence at locations the plans show.

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#### **B** Materials

Furnish notched conventional metal "T" or "U" shaped fence posts.

Furnish fence fabric meeting the following requirements.

Color: International orange (UV stabilized)

Roll Height: 4 feet

Mesh Opening: 1 inch min to 3 inch max

Resin/Construction: High density polyethylene mesh

Tensile Yield: Avg. 2000 lb per 4 ft. width (ASTM D638)

Ultimate Tensile Strength: Avg. 3000 lb per 4 ft. width (ASTM D638)

Elongation at Break (%): Greater than 100% (ASTM D638)

Chemical Resistance: Inert to most chemicals and acids

#### C Construction

Drive posts into the ground 12 to 18 inches. Space posts at 7 feet.

Use a minimum of three wire ties to secure the fence at each post. Weave tension wire through the top row of strands to provide a top stringer that prevents sagging.

Overlap two rolls at a post and secure with wire ties.

#### **D** Measurement

The department will measure Fence Safety by the linear foot along the base of the fence, center-to-center of posts, acceptably completed.

#### E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER DESCRIPTION UNIT 616.0700.S Fence Safety LF

Payment is full compensation for furnishing and installing fence and posts; maintaining the fence and posts in satisfactory condition; and for removing and disposing of fence and posts at project completion. stp-616-030 (20160607)

## 11. Install Conduit Into Existing Item, Item 652.0700.S.

#### **A Description**

This special provision describes installing proposed conduit into an existing manhole, pull box, junction box, communication vault, or other structure.

#### **B** Materials

Use 2-inch and 3-inch nonmetallic conduit as provided and paid for under other items in this contract. Furnish backfill material, topsoil, fertilizer, seed, and mulch conforming to the standard spec.

#### **C** Construction

Expose the outside of the existing structure without disturbing existing conduits or cabling. Drill the appropriate sized hole for entering conduits at a location within the structure without disturbing the existing cabling and without hindering the installation of new cabling within the installed conduit. Fill void area between the drilled hole and conduit with an engineer-approved filling material to protect against conduit movement and entry of fill material into the structure. Tamp backfill into place.

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#### **D** Measurement

The department will measure Install Conduit Into Existing System by the unit, acceptably installed. Up to five conduits entering a structure per entry point into the existing structure will be considered a single unit. Conduits in excess of five, or conduits entering at significantly different entry points into the existing pull box, manhole, or junction box will constitute multiple units of payment.

## **E** Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER DESCRIPTION UNIT 652.0700.S Install Conduit Into Existing Item EACH

Payment is full compensation for excavating, drilling holes; furnishing and installing all materials, including bricks, coarse aggregate, sand, bedding, and backfill; for excavating and backfilling; and for furnishing and placing topsoil, fertilizer, seed, and mulch in disturbed areas; for properly disposing of surplus materials; and for making inspections.

stp-652-070 (20100709)

## 12. Traffic Signals & Street Lighting, General

Notify the department's Electrical Field Unit at (715) 577-5399 at least three weeks prior to the beginning of the traffic signal work.

## **Department Furnished Equipment**

The Northwest Region electrical unit will furnish all equipment and cable for Emergency Vehicle Preemption systems. The Northwest Region electrical unit will complete all connections inside the signal cabinet. The contractor shall install the department furnished EVP items external to the control cabinet. The contractor shall provide all stainless steel banding materials and incidental items necessary for installation.

Notify the Northwest Region – Eau Claire Office Electrical Unit at (715) 577-5399, and make arrangements for picking up the remaining northwest region furnished materials three working days prior to picking the materials up. Transport Northwest Region furnished materials from the Northwest Region – Eau Claire Office Electrical Shop, Highway 53 South, Eau Claire, WI, to the project location.

#### **Equipment Installation**

Traffic signal heads on existing traffic signal poles to be removed shall remain operational until all traffic signal heads on newly installed traffic signal poles are operational. Traffic signal heads on newly installed traffic signal poles shall be bagged until all traffic signal heads on that pole are operational.

## 13. Traffic Signal Face 3S 12-Inch, Item 658.0173; Traffic Signal Face 4S 12-Inch, Item 658.0174.

Replace standard spec 658.2, paragraph (2) with the following:

- (2) Furnish materials from the department's QPL as follows:
  - Traffic signal faces including signal housing, retroreflective backplates and LED modules.
  - Pedestrian signal faces including signal housing and LED modules.
  - Pedestrian push buttons.
  - Cable assembly signal mounting hardware.

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## 14. Intelligent Transportation Systems - General Requirements.

## **A Description**

#### A.1 General

This special provision describes providing elements for an Intelligent Transportation System (ITS) in or along the existing roadway as the plans show.

Unusual aspects of this project include:

- 1. The project includes working on cables and equipment that are carrying data between roadside equipment and the department's Traffic Management Center (TMC). Interruption of this service is not expected to perform this work. If an interruption is determined necessary, it must be done on a weekend, and must be done in a way that minimizes communication outages for the existing equipment. Notify the department's TMC at least 72 hours in advance of the planned interruption.
- 2. The department will furnish some of the equipment to be installed. Make a reasonable effort to discover defects in that equipment before installing it.

## A.2 Surge Protection

Equip every ungrounded conductor wire entering or leaving any equipment cabinet with a surge protector. For purposes of this section, multiple cabinets on a single pole or foundation are considered a single cabinet.

#### **B** Materials

#### **B.1** General

Only furnish equipment and component parts for this work that are new and have high quality workmanship. All controls, indicators, and connectors shall be clearly and permanently labeled in a manner approved by the engineer. All equipment of each type shall be identical.

All electrical equipment shall conform to the standards and requirements of the Wisconsin Electrical Code, the National Electrical Manufacturers Association (NEMA), National Electric Safety Council (NESC), Underwriter's Laboratory Inc. (UL) or the Electronic Industries Association (EIA), when applicable. All materials and workmanship shall conform to the requirements of the National Electrical Code (NEC), Rural Electrification Administration (REA), Standards of the American Society for Testing and Materials (ASTM), American Association of State Highway and Transportation Officials (AASHTO), requirements of the plans these special provisions, the standard specifications, and to any other codes, standards, or ordinances that may apply. All system wiring, conduit, grounding hardware and circuit breakers shall be in conformance with the National Electrical Code. Whenever reference is made to any of the standards mentioned, the reference shall be considered to mean the code, ordinance, or standard that is in effect at the time of the bid advertisement.

#### **B.2 Outdoor Equipment**

All conductive connectors, pins (except pins connected by soldering), and socket contacts shall be gold plated. Acrylic conformal coating shall protect each circuit board side that has conductive traces. Except for integrated circuits containing custom firmware, all components shall be soldered to the printed circuit board.

To prevent galvanic corrosion, all connections between dissimilar metals shall incorporate a means of keeping moisture out of the connection. Where the connection need not conduct electricity, interpose a non-absorbing, inert material or washer between the dissimilar metals. Use nonconductive liners and washers to insulate fasteners from dissimilar metals. Where the connection must conduct electricity, use a conductive sealant between the dissimilar metals. Alternatively, use an insulating gasket and a bond wire connecting the two metal parts.

## **B.3 Custom Equipment**

Equipment that is not part of the manufacturer's standard product line, or that is made or modified specifically for this project, shall conform to the following requirements:

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Where practical, electronics shall be modular plug-in assemblies to facilitate maintenance. Such assemblies shall be keyed to prevent incorrect insertion of modules into sockets.

All components shall be available from multiple manufacturers as part of the manufacturers' standard product lines. All must be clearly labeled with the value, part number, tolerance, or other information sufficient to enable a technician to order an exact replacement part.

Lamps used for indicator purposes shall be light-emitting diodes.

The printed circuit boards shall be composed of "two-ounce" copper on 1/16 inch thick fiberglass epoxy or equivalent type construction. Holes that carry electrical connections from one side of the boards to the other shall be completely plated through. Multilayer printed circuit boards shall not be used. The name or reference number used for the board in the drawings and maintenance manuals supplied to the department shall be permanently affixed to each board.

All components shall be mounted so that the identifying markings are visible without moving or removing any part, if practical.

#### **B.4 Environmental Conditions**

Equipment shall continue to operate as specified under the following ranges of environmental conditions, except as noted in the specifications for individual pieces of equipment.

- 1. **Vibration and Shock:** Vehicle speed and classification sensors and any other equipment mounted atop poles or on structures shall not be impaired by the continuous vibration caused by winds (up to 90 mph with a 30 percent gust factor) and traffic.
- 2. Duty Cycle: Continuous
- 3. **Electromagnetic Radiation:** The equipment shall not be impaired by ambient electrical or magnetic fields, such as those caused by power lines, transformers, and motors. The equipment shall not radiate signals that adversely affect other equipment.

#### 4. Electrical Power:

- 4.1. **Operating power:** The equipment shall operate on 120-volts, 60-Hz, single-phase unless otherwise specified. It shall conform to its specified performance requirements when the input voltage varies from 89 to 135 volts and the frequency varies +3 Hz.
- 4.2. **High frequency interference:** The equipment operation shall be unaffected by power supply voltage spikes of up to 150 volts in amplitude and 10 microseconds duration.
- 4.3. **Line voltage transients:** The equipment operation shall be unaffected by voltage transients of plus or minus 20 percent of nominal line voltage for a maximum duration of 50 milliseconds. Equipment in the field shall meet the power service transient requirements of NEMA Standard TS-2 when connected to the surge protectors in the cabinets.

## 5. Temperature and Humidity:

- 5.1. Field equipment: Equipment in the field shall meet the temperature and humidity requirements of NEMA Standard TS-2. Liquid crystal displays shall be undamaged by temperatures as high as 165 degrees F, and shall produce a usable display at temperatures up to 120 degrees F.
- 5.2. **Equipment in Controlled Environments:** shall operate normally at any combination of temperatures between 50 degrees F and 100 degrees F, and humidity's between 5 percent and 90 percent, non-condensing, and with a temperature gradient of 9 degrees F per hour.

## **B.5 Patch Cables and Wiring**

All cables and wiring between devices installed in a single cabinet, or in separate cabinets sharing a single concrete base, will be considered incidental to the installation of the devices and no separate payment will be made for them. It is anticipated that this will include fiber optic patch cables between termination panels and Ethernet switches, 10 / 100 MBPS Ethernet cables, RS-232 cables between individual devices and terminal servers, and power cables between individual devices and power sources within the cabinets.

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#### **B.6 Surge Protection**

Low-voltage signal pairs, including twisted pair communication cable entering each cabinet shall be protected by two-stage, plug-in surge protectors and shall be installed on both ends of camera control cables. The protectors shall meet or exceed the following minimum requirements:

- 1. The protectors shall suppress a peak surge current of up to 10k amps.
- 2. The protectors shall have a response time less than one nanosecond.
- 3. The protector shall clamp the voltage between the two wires at a voltage that is no more than twice the peak signal voltage, and clamp the voltage between each wire and ground at 50 volts.
- 4. The first stage of protection shall be a three-element gas discharge tube, and the second stage shall consist of silicon clamping devices.
- 5. The protector shall also contain a resettable fuse (PTC) to protect against excessive current.
- 6. There shall be no more than two pairs per protector.
- 7. It shall be possible to replace the protector without using tools.

Cables carrying power to curve signs shall be protected at the cabinet by grounded metal oxide varistors of appropriate voltages. The varistors must be at least 0.8 inch in diameter.

#### **C** Construction

#### C.1 Thread Protection

Provide rust, corrosion, and anti-seize protection at all thread assemblies of metallic parts by coating (non-spray) the mating surfaces with an approved compound. Failure to use an approved compound will result in no payment for the items to which coating was to have been applied.

## C.2 Cable Installation

When installing new cables into conduits containing existing cables, remove the existing cables and reinstall the existing cables simultaneously with the new cables. Take every precaution necessary to protect the existing cables. In the event of avoidable damage to the existing cables, replace all damaged cables, in-kind, at no additional expense to the department. When cables are pulled into conduit, use a cable pulling lubricant approved by the cable manufacturer. Submit documentation supporting manufacturer approval of the lubricant to the engineer.

## C.3 Wiring

Every conductor, except a conductor contained entirely within a single piece of equipment, must terminate either in a connector or on a terminal block. Provide and install the connectors and terminal blocks where needed, without separate payment. Use approved splice kits instead of connectors and terminal blocks for underground power cable splices.

Permanently label and key connectors to preclude improper connection. Obtain prior engineer approval for labeling methods before use.

Terminal blocks must be affixed to panels that permanently identify the block and what wire connects to each terminal. This may be accomplished by silk screening or by installing a laminated printed card under the terminal block, with the labels on portions of the card that extend beyond the block. Installation of terminal blocks by drilling holes in the exterior wall of the cabinet is not acceptable.

Use barriers to protect personnel from accidental contact with all dangerous voltages.

Do not install conductors carrying AC power in the same wiring harness as conductors carrying control or communication signals.

Arrange wiring, including fiber optic pigtails, so that any removable assembly can be removed without disturbing wiring that is not associated with the assembly being removed.

Communication and control cables may not be spliced underground, except where indicated on the plans.

Cables in the Traffic Management Center or in communication hubs, which are not contained within a single cabinet, shall have at least 10 feet of slack.

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## **C.4 System Operations**

If the contractor's operations unexpectedly interrupt Intelligent Transportation Systems (ITS) service, notify the engineer immediately and restore service within 24 hours. Repair all damaged facilities to the condition existing before the interruption. If service is not restored within 24 hours, the department may restore service to any operating device and deduct restoration costs from payments due the contractor.

## **C.5 Surge Protection**

Arrange the equipment and cabinet wiring to minimize the distance between each conductor's point of entry and its protector. Locate the protector as far as possible from electronic equipment. Ensure that all wiring between the surge protectors and the point of entry is free from sharp bends.

## **C.6. CCTV Power Source**

The electrical service shall be drawn from the existing signal cabinet as shown on the plans. Contact the Region's Electrical Unit at least two weeks prior to the installation of the CCTV camera assembly to coordinate the necessary adjustments required in the existing signal cabinet.

#### **D** Measurement

The department will not measure the work performed under this special provision.

#### **E** Payment

The department will pay for the work performed under this special provision under the contract ITS bid items

## 15. Intelligent Transportation Systems (ITS) – Control of Materials.

## Standard spec 106.2 – Supply Source and Quality

Add the following to standard spec 106.2:

The department will furnish a portion of equipment to be installed by the contractor. This department-furnished equipment includes the following:

Department-Furnished Items		
(1) Pole, 50', Freeway, with Lowering System		
(1) Camera, Traffic, Dome-Style, Outdoor		
(2) Cabinet, Pole-Mounted		
(1) Sign, Dynamic Message, 80 x 256, Full Color Ground Mounted		
(2) Wireless Ethernet Bridge		
(2) Ethernet Switch		
(1) Cellular Modem with Antenna		

Contact Dean Beekman, TMC, at (414) 227-2154 to obtain a copy of the manufacturer list and contact names for department-furnished equipment.

Pick-up small department-furnished equipment, such as communications devices, cameras, and controllers, from the department's Traffic Management Center (TMC), 433 W. St. Paul Ave., Milwaukee, WI 53203 at a mutually agreed upon time during normal state office hours. Contact the department's STOC at (414) 227-2166 to coordinate pick-up of equipment.

Large department-furnished equipment, such as camera poles will be delivered by the supplier to a contractor-controlled site within Eau Claire County. Delivery will not necessarily be in a "just in time" manner. Store the equipment until field installation. Provide location details and a contact for delivery coordination upon receiving the contract's Notice to Proceed.

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Transportation of the equipment between the electric shop and the field or interim locations is the responsibility of the contractor.

## Standard spec 106.3 – Approval of Materials

Add the following to standard spec 106.3:

## **Design/Shop Drawings**

Before the purchase and/or fabrication of any of the components listed herein, and for any non-catalog item shown on the Material and Equipment List specified above, and no more than 30 days after notice to proceed, submit five copies of design drawings and shop drawings, as required, to the department for review. The items and the drawings that represent them shall meet the requirements of the standard specifications.

Design drawing submissions shall consist of signed and certified designs, design drawings, calculations, and material specifications for required items.

Shop drawings will be required for, but not limited to the following:

- 1. Mounting assemblies for the vehicle speed and classification sensors, including their attachment to the structure.
- 2. Mounting LED warning signs to the sign structure.
- 3. Mounting detail for dynamic message signs.
- 4. Any contractor-designed structure or foundation.

The department will complete its review of the material within 30 days from the date of receipt of the submission, unless otherwise specified. The department will advise the contractor, in writing, as to the acceptability of the material submitted. The department may determine that if no exceptions were taken for the item, it is approved, and no further action is required by the contractor; or the item may be partially or totally rejected, in which case modify and/or amend the submittal as required by the department and resubmit the item within 14 days. At this time, the review and approval cycle described above will begin again.

stp-670-005 (20150630)

## 16. Install Pole Mounted Cabinet, Item 673.0225.S.

## **A Description**

This special provision describes installing department furnished aluminum enclosures on poles for intelligent transportation systems equipment.

### **B** Materials

Use stainless steel bolts, nuts, and washers unless otherwise specified.

All conductors, terminals, and parts that could be hazardous to maintenance personnel shall be protected with suitable insulating material.

The cabinet will be equipped with service panels. Two panels shall be provided and mounted on the cabinet sidewalls. The left side panel shall be designated as "Input/Communications," and the right side panel shall be designated as the "Service Panel."

The service panel will be equipped with a four-outlet handi-box. Wire the handi-box to the series portion of the filtering surge protector.

Use metallic conduit, fittings, and adapters required from the underground conduit transition point to the cabinet as part of this item. A typical installation requires on 2-inch conduit. Use metallic conduit conforming to standard spec 652.

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#### **C** Construction

Fasten the field cabinet securely onto a pole. Provide bolted stainless steel connections with lock washers, locking nuts, or other engineer-approved means to prevent the connection nuts from backing off. Isolate dissimilar materials from one another using stainless steel fittings. Make all power connections to the cabinet as specified in standard spec 656.

Drill and tap the cabinet, as necessary, to mount the terminal blocks and other attachments to the service panel, to provide an entrance on the back of the cabinet for cable from the pole mounted intelligent transportation systems equipment, and to mount the service panel to the cabinet as shown in the details. Remove all sharp edges or burrs, or both, caused by the cutting or drilling process. Seal all openings to prevent water from entering the cabinet. Mount the surge protector to the service panel.

Install metallic conduit on the exterior of the pole (for entrance to the cabinet from the ground) as the plans show, and according to the applicable requirements of standard spec 652.

#### **D** Measurement

The department will measure Install Pole Mounted Cabinet as each individual assembly, acceptably completed.

## **E** Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER DESCRIPTION UNIT 673.0225.S Install Pole Mounted Cabinet EACH

Payment is full compensation for installing the pole mounted cabinet; for making all connections and conduit/wire entrances; and for all testing.

stp-673-010 (20100630)

#### 17. Install Ground Mounted DMS Full Matrix, Item SPV.0060.001.

#### **A Description**

This special provision describes installing a department-furnished dynamic message sign and controller on structural steel sign supports (paid for separately), and integrating the sign and making it functional in the existing system.

## **B** Materials

The department will provide the dynamic message sign, controller, and the control cable. The control cable will be multi-mode fiber optic cable.

Cables not furnished by the department, nor associated with other bid items, will be considered incidental.

#### **C** Construction

Install the department-furnished sign and sign components as indicated on the plans.

Connect the power and control cables according to the manufacturer's recommendations.

Bond the bottom of the sign structure to one of more ground rods. Use exothermic welding at each end of the ground wire (unless the steel structure has a suitable grounding lug). Use an AWG #6 solid, bare copper wire to bond the sign structure to the ground rod(s). Use a device that measure resistance to ground using the three-point fall-of-potential method to ensure that the resistance from the sign's ground bar to ground does not exceed 4 ohms. Add more ground rods if necessary to achieve this requirement.

### **D** Measurement

The department will measure Install Ground Mounted DMS Full Matrix as each individual assembly, acceptably completed.

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## **E** Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBERDESCRIPTIONUNITSPV.0060.001Install Ground Mounted DMS Full MatrixEACH

Payment is full compensation for installing and testing the sign and controller, fabrication and installation of all mounting hardware, providing cables, conduits, and fittings; for testing the sign; for transporting materials; and for making the sign full operational.

## 18. Install Wireless Ethernet Bridge, Item SPV.0060.002.

## **A Description**

This special provision describes installing a department-furnished wireless Ethernet bridge access point or subscriber unit at a new or existing cabinet or new or existing pole.

#### **B** Materials

Department-furnished materials will include wireless Ethernet bridge with integral antenna, power converter, and mounting bracket.

The contractor shall furnish mounting hardware, outdoor rated Category 6 communications cable, and inline network cable surge suppressor.

#### **C** Construction

Bond the surge suppressor to the cabinet grounding system.

Install the wireless Ethernet bridge in a point-to-point or point-to-multipoint configuration as shown on the plans and as directed by the engineer.

Use the manufacturer's set-up software to configure the Ethernet bridge radio for its intended use. Use the signal strength indicator on the radio to find the optimum position. Perform a frequency analysis to determine the optimal hop pattern of the radios and test the continuity of the link by polling the radios using the software provided. Adjust the position of the radio and the hop pattern until the polls show at least 200 consecutive polling intervals have been successfully transmitted and received. Demonstrate to the engineer that the hop pattern selected corresponds to the optimal noise free frequencies identified in the frequency analysis. Deliver three copies of the final test results for signal strength, frequency analysis, and test polling.

#### **D** Measurement

The department will measure Install Wireless Ethernet Bridge as each individual assembly, acceptably completed.

#### E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBERDESCRIPTIONUNITSPV.0060.002Install Wireless Ethernet BridgeEACH

Payment is full compensation for transporting materials, installing, setting up, configuring, and testing the wireless Ethernet bridge radio, surge suppressor, cables, and connections.

## 19. Luminaire Arms Single Member 15 5/8-Inch Clamp 15-FT, Item SPV.0060.003.

## **A Description**

This special provision describes furnishing, assembling, and installing aluminum luminaire arms according to standard spec 657 and as hereinafter provided.

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#### **B** Materials

Furnish materials according to standard spec 657.2.

Order and schedule delivery of the luminaire arms immediately upon contract execution.

#### C Construction

Install luminaire arms according to standard spec 657.3.

Contact the department's electrical field unit at (715) 577-5399 to determine the orientation of the luminaire arms. Contact the department five days prior to drilling Type 13 poles for luminaire arms.

#### **D** Measurement

The department will measure Luminaire Arms Single Member 15 5/8-Inch Clamp 15-FT, as each individual unit, completed according to the contract and accepted.

## **E** Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBERDESCRIPTIONUNITSPV.0060.003Luminaire Arms Single Member 15 5/8-Inch Clamp 15-FTEACH

Payment is full compensation for furnishing, assembling, and installing the luminaire arms.

## 20. Sawing Curb Head, Item SPV.0090.001.

#### **A Description**

This special provision describes providing a sawcut at the flow line of existing curb and gutter locations in order to remove the existing curb head as shown on plans, and hereinafter provided.

#### **B** Materials

Furnish materials that are according to the pertinent requirements of standard spec 690.

## **C** Construction

Perform work according to the construction details and standard spec 690.

#### **D** Measurement

The department will measure Sawing Curb Head by the linear foot, acceptably completed, as measured along the existing face of the curb.

## **E** Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER DESCRIPTION UNIT SPV.0090.001 Sawing Curb Head LF

Payment is full compensation for sawing and removal of the existing curb head, sludge removal and disposal.

21. Install State Furnished EVP Detector Heads STH 312 & Truax Ln, Item SPV.0105.001; Install State Furnished EVP Detector Heads STH 312 & Mill Run Rd, Item SPV.0105.002; Install State Furnished EVP Detector Heads STH 312 & CTH TT, Item SPV.0105.003; Install State Furnished EVP Detector Heads USH 12 & Brakke Dr, Item SPV.0105.004; Install State Furnished EVP Detector Heads USH 12 & CTH UU, Item SPV.0105.005; Install State Furnished EVP Detector Heads STH 64 & STH 65, Item SPV.0105.006.

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## **A Description**

This special provision describes the transporting and installing of department furnished Emergency vehicle Preemption (EVP) Detector Heads on poles at the specified intersection as shown in the plans:

- STH 312 & Truax Ln
- · STH 312 & Mill Run Rd
- · STH 312 & CTH TT
- USH 12 & Brakke Dr
- · USH 12 & CTH UU
- STH 64 & STH 65

#### **B** Materials

Use materials furnished by the department, including: Emergency Vehicle Preemption (EVP) Detector Heads.

Pick up the department furnished materials at the department's Electrical Shop located at 5009 USH 53 South, Eau Claire, WI 54701. Notify the department's Electrical Field Unit at (715) 577-5399 and make arrangements for picking up the department furnished materials at least five working days prior to picking the materials up.

#### **C** Construction

Install the EVP detector heads and terminate the EVP cable ends at the EVP detector heads as shown on the plans. The department will determine the exact location to ensure that the installation does not create a sight obstruction. The department will install the discriminators and card rack in the cabinet.

Notify the department's Electrical shop at (715) 577-5399 upon completion of the installation of the Emergency Vehicle Preemption (EVP) Detector Heads.

#### **D** Measurement

The department will measure Install State Furnished EVP Detector Heads (location) as a single lump sum unit of work, acceptably completed.

## **E** Payment

The department will pay for measured quantities at the contract unit price under the following bid items:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.001	Install State Furnished EVP Detector Heads STH 312 & Truax Ln	LS
SPV.0105.002	Install State Furnished EVP Detector Heads STH 312 & Mill Run Rd	LS
SPV.0105.003	Install State Furnished EVP Detector Heads STH 312 & CTH TT	LS
SPV.0105.004	Install State Furnished EVP Detector Heads USH 12 & Brakke Dr	LS
SPV.0105.005	Install State Furnished EVP Detector Heads USH 12 & CTH UU	LS
SPV.0105.006	Install State Furnished EVP Detector Heads STH 64 & STH 65	LS

Payment is full compensation for transporting and installing of department furnished Emergency Vehicle Preemption (EVP) Detector Heads and terminating the EVP cable ends at the detector heads.

22. Remove Traffic Signals STH 312 & Truax Ln, Item SPV.0105.007;

Remove Traffic Signals STH 312 & Mill Run Rd, Item SPV.0105.008;

Remove Traffic Signals STH 312 & CTH TT, Item SPV.0105.009;

Remove Traffic Signals USH 12 & Brakke Dr, Item SPV.0105.010;

Remove Traffic Signals USH 12 & CTH UU, Item SPV.0105.011;

Remove Traffic Signals STH 64 & STH 65, Item SPV.0105.012.

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## **A Description**

This special provision describes removing existing traffic signals at the following intersections according to the pertinent provisions of standard spec 204 and as hereinafter provided. Specific removal items are noted in the plans:

- STH 312 & Truax Ln
- · STH 312 & Mill Run Rd
- STH 312 & CTH TT
- · USH 12 & Brakke Dr
- · USH 12 & CTH UU
- · STH 64 & STH 65

## B (Vacant)

#### **C** Construction

Arrange for the de-energizing of the traffic signals with the department's Electrical Field Unit after receiving approval from the engineer that the existing traffic signals can be removed.

Notify the department's Electrical Field Unit at (715) 577-5399 at least three weeks prior to the beginning of the traffic signal removal work. Complete the removal work as soon as possible following shut down of this equipment.

The department assumes that all equipment is in good condition and in working order prior to the contractor's removal operation. Prior to removal, inspect and provide a list of any damaged or non-working traffic signal equipment to the engineer. Any equipment not identified as damaged or not working, prior to removal, shall be replaced by the contractor at no cost.

Remove all standards and poles per plan from their concrete footings and disassemble out of traffic. Remove the bases from each pole. Remove the signal heads, mast arms, wiring/cabling, and traffic signal mounting devices from each signal standard, arm or pole. Ensure that all access hand hole doors and all associated hardware remain intact. Dispose of the underground signal cable and internal wires off the state right-of-way. Salvage the above ground equipment and deliver it to the Northwest Region – Eau Claire Office Electrical Shop, Highway 53 South, Eau Claire, WI. Contact the department's Electrical Field Unit at (715) 577-5399 at least three working days prior to delivery to make arrangements.

Traffic signals shall remain operational during construction. Only the traffic signal heads associated with monotube pole installation may be out of service at any one time. Each signal face shall be in operation at all times work is not being actively performed on that face, including overnight.

#### **D** Measurement

The department will measure Remove Traffic Signals (Location) as a single lump sum unit of work for each intersection, acceptably completed.

#### **E** Payment

The department will pay for measured quantities at the contract unit price under the following bid items:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.007	Remove Traffic Signals STH 312 & Truax Ln	LS
SPV.0105.008	Remove Traffic Signals STH 312 & Mill Run Rd	LS
SPV.0105.009	Remove Traffic Signals STH 312 & CTH TT	LS
SPV.0105.010	Remove Traffic Signals USH 12 & Brakke Dr	LS
SPV.0105.011	Remove Traffic Signals USH 12 & CTH UU	LS
SPV.0105.012	Remove Traffic Signals STH 64 & STH 65	LS

Payment is full compensation for removing, disassembling traffic signals, scrapping of some materials, disposing of scrap material, delivering the requested materials to the department, and incidentals necessary to complete the contract work.

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## ADDITIONAL SPECIAL PROVISION 4

## **Payment to First-Tier Subcontractors**

Within 10 calendar days of receiving a progress payment for work completed by a subcontractor, pay the subcontractor for that work. The prime contractor may withhold payment to a subcontractor if, within 10 calendar days of receipt of that progress payment, the prime contractor provides written notification to the subcontractor and the department documenting "just cause" for withholding payment.

The prime contractor may also withhold routine retainage from payments due subcontractors.

## **Payment to Lower-Tier Subcontractors**

Ensure that subcontracting agreements at all tiers provide prompt payment rights to lower-tier subcontractors that parallel those granted first-tier subcontractors in this provision.

## **Release of Routine Retainage**

After granting substantial completion the department may reduce the routine retainage withheld from the prime contractor to 75 percent of the original total amount retained.

When the Department sends the semi-final estimate the department may reduce the routine retainage withheld from the prime contractor to 10 percent of the original total amount retained.

Within 30 calendar days of receiving the semi-final estimate from the department, submit written certification that subcontractors at all tiers are paid in full for acceptably completed work and that no routine retainage is being withheld. The department will pay the prime contractor in full and reduce the routine retainage withheld from the prime contractor to zero when the department approves the final estimate.

This special provision does not limit the right of the department, prime contractor, or subcontractors at any tier to withhold payment for work not acceptably completed or work subject to an unresolved contract dispute.

# ADDITIONAL SPECIAL PROVISION 6 ASP 6 - Modifications to the standard specifications

Make the following revisions to the standard specifications:

#### 107.17.1 General

Replace paragraph seven with the following effective with the December 2018 letting:

(7) Have a professional engineer registered in the state of Wisconsin sign and seal the shop drawings. At least 30 calendar days before starting falsework, form, or shoring construction; submit a PDF file of shop drawings to the railroad's chief engineering officer and to the engineer. The engineer and the railroad may review the shop drawings. If the engineer or the railroad finds the shop drawings unsatisfactory, the contractor shall make the required changes. A satisfactory shop drawing review does not relieve the contractor of responsibility and liability for the structural integrity and proper functioning of the falsework, forms, or shoring.

#### 305.2.1 General

Replace paragraph two with the following effective with the December 2018 letting:

(2) Where the contract specifies or allows 1 1/4-inch base, do not place reclaimed asphalt, reprocessed material, or blended materials below virgin aggregate materials unless the contract specifies or the engineer allows in writing. The department will allow virgin aggregate above reclaimed asphalt, reprocessed material, or blended materials in shoulder areas adjacent to concrete pavement.

#### 420.3.2.1 General

Replace paragraph one with the following effective with the December 2018 letting:

(1) Use self-propelled grinding machines with depth, grade, and slope controls designed for grinding and texturing concrete. Equip grinding machines with diamond blades and a vacuuming system capable of removing liquid and solid residue from the ground surface. Shroud the machine to prevent discharging loosened material into adjacent work areas or live traffic lanes. Provide the specified effective wheelbase, defined as the center of the front to center of the rear main support wheels.

## 420.3.2.2 Continuous Grinding

Replace paragraph one with the following effective with the December 2018 letting:

(1) Under the Continuous Diamond Grinding Concrete Pavement bid item, ensure that the grinding machine, including the grinding head, weighs 35,000 pounds or more, will grind a strip at least 4 feet wide, and has an effective wheel base of 25 feet or more. For pavements with a design speed less than 40 miles per hour and areas difficult to access, the contractor may use equipment with an effective wheel base of 12 feet or more.

## 450.3.2.8 Jointing

Replace paragraphs three through five with the following effective with the December 2018 letting:

- (3) Construct notched wedge longitudinal joints for mainline paving if the pavement thickness conforms to the minimums specified in 460.3.2, unless the engineer directs or allows an alternate joint. Construct the wedge using a slope no steeper than 3:1. Extend the wedge 12 inches beyond the normal lane width, or as the engineer directs. Ensure that the wedge for all layers directly overlaps and slopes in the same direction.
- (4) Locate the joint at the pavement centerline for 2-lane roadways, or at lane lines if the roadway has more than 2 lanes. Construct a vertical notch 1/2-inch to 3/4-inch high on the centerline or lane line at the top of each wedge. Place a 1/2-inch to 3/4-inch notch at the outside bottom edge of the wedge after compacting each layer. Align the finished longitudinal joint line of the upper layer with the centerline or lane line.
- (5) Construct the wedge for each layer using an engineer-approved strike-off device that will provide a uniform slope and will not restrict the main screed. Shape and compact the wedge with a weighted

steel side roller wheel the same width as the wedge. Apply a tack coat to the wedge surface and both notches before placing the adjacent lane.

## 455.2.4.3 Emulsified Asphalts

Replace paragraph two with the following effective with the December 2018 letting:

(2) The bill of lading for emulsified asphalts shall indicate the asphalt content of the original emulsion and dilution rate of the additional water added to the original emulsion. If undiluted samples are not available, test the diluted material and modify AASHTO M140, M208, or M316 to reflect properties resulting from dilution of the asphalt.

## 460.2.8.3.1.4 Department Verification Testing Requirements

Replace paragraph three with the following effective with the December 2018 letting:

(3) The department will perform testing conforming to the following standards:

Bulk specific gravity (G<sub>mb</sub>) of the compacted mixture according to AASHTO T166.

Maximum specific gravity (G<sub>mm</sub>) according to AASHTO T209.

Air voids (Va) by calculation according to AASHTO T269.

VMA by calculation according to AASHTO R35.

Asphalt content by ignition oven according to AASHTO T308 as modified in CMM 8-36.6.3.6, chemical extraction according to AASHTO T-164, or Asphalt Analyzer™ according to manufacturer recommendations.

## 460.2.8.3.1.6 Acceptable Verification Parameters

Replace paragraph one with the following effective with the December 2018 letting:

- (1) The engineer will provide test results to the contractor within 2 mixture-production days after obtaining the sample. The quality of the product is acceptably verified if it meets the following limits:
  - Va is within a range of 2.0 to 4.3 percent. For SMA, Va is within a range of 2.7 to 5.3 percent.
  - VMA is within minus 0.5 of the minimum requirement for the mix design nominal maximum aggregate size.
  - Asphalt content is within minus 0.3 percent of the JMF.

#### 460.2.8.3.1.7 Dispute Resolution

Replace paragraph one with the following effective with the December 2018 letting:

(1) When QV test results do not meet the specified limits for 100 percent pay, the bureau's AASHTO accredited laboratory and certified personnel will referee test the retained portion of the QV sample and the retained portion of the required forward and backward QC retained samples according to CMM 8-36.

## 460.5.2.1 General

Replace paragraphs five and six with the following effective with the December 2018 letting:

(5) The department will reduce pay for nonconforming QMP HMA mixtures as specified in 460.2.8.2.1.7, starting from the stop point to the point when the running average of 4 is back inside the warning limits. The engineer will determine the quantity of material subject to pay reduction based on the testing data and an inspection of the completed pavement. The department will reduce pay as follows:

#### PAYMENT FOR MIXTURE[1][2][3]

	PRODUCED WITHIN	PRODUCED OUTSIDE
ITEM	WARNING BANDS	JMF LIMITS
Gradation	90%	75%
Asphalt Content <sup>[4]</sup>		
Air Voids	70%	50%
\/M <b>A</b>	90%	75%

- [1] For projects or plants where the total production of each mixture design requires less than 4 tests refer to CMM 8-36.
- Payment is in percent of the contract unit price for the HMA Pavement bid item. The department will reduce pay based on the nonconforming property with lowest percent pay. If the quantity of material subject to pay adjustment based on the running average of 4 is also subject to pay adjustment resulting from dispute resolution in accordance with 460.2.8.3.1.7, the department will apply the single pay adjustment resulting in the lowest percent pay.
- [3] In addition to any pay adjustment listed in the table above, the department will adjust pay for nonconforming binder under the Nonconforming QMP Asphaltic Material administrative item. The department will deduct 25 percent of the contract unit price of the HMA Pavement bid item per ton of pavement placed with nonconforming PG binder the engineer allows to remain in place.
- [4] The department will not adjust pay based on a running average of 4 asphalt content tests; however, corrective action will be applied to nonconforming material according to 460.2.8.2.1.7.
- (6) If during a QV dispute resolution investigation the department discovers unacceptable mixture defined by one or more of the following:
  - Va greater than 5.0 or less than 1.5.
  - VMA more than 1.0 below the minimum allowed in table 460-1.
  - AC more than 0.5 % below the JMF target.

Remove and replace the material, or if the engineer allows the mixture to remain in place, the department will pay for the quantity of affected material at 50 percent of the contract price.

## 506.3.2 Shop Drawings

Replace paragraph four with the following effective with the December 2018 letting:

(4) Ensure that the fabricator submits a PDF file of shop drawings for railroad structures to the railroad company's chief engineering officer upon contract completion.

### 650.3.1 General

Replace the entire text with the following effective with the December 2018 letting:

- (1) Department and contractor responsibilities for construction staking are specified in 105.6. Conform to 105.6 and the additional requirements specified here in 650.3 for the individual contractor-staking bid items the contract includes.
- (2) Protect and preserve known property and survey marks and land monuments as specified in 107.11.3. The contract may require related work under the 621 bid items.
- (3) Obtain or calculate benchmark data, grades, and alignment from plan information. The engineer will furnish data for the horizontal and vertical control points, control point ties, horizontal alignments, profiles, and elevations. Reestablish, set additional, and maintain the horizontal and vertical control points and control point ties, as needed for bid items.
- (4) Check horizontal and vertical information including but not limited to alignments, locations, elevations, and dimensions, that either the plans show or the engineer provides, for compatibility with existing field conditions. Conduct similar compatibility checks and accuracy checks of horizontal and vertical positions either the department or the contractor establishes in the field.
- (5) Perform survey work using conventional methods, or AMG methods capable of achieving the lines and grades the plans show for the work in question. Establish additional benchmarks and control points as necessary to support the method of operation.

#### 650.3.1.1 Staking

- (1) Furnish, set, reference, and maintain stakes and markings necessary to establish the alignment, location, benchmarks, elevations, and continuous profile-grades for road and structure work as needed for bid items. Supervise and coordinate construction staking.
- (2) Maintain neat, orderly, and complete survey notes, drawings, and computations used in establishing the lines and grades. Make the survey notes and computations available to the engineer within 24 hours, upon request, as the work progresses.
- (3) Furnish surveying equipment, stakes, flags, pins, lath, whiskers, and other materials necessary to perform this work, subject to the engineer's approval.

#### 650.3.1.2 Automated Machine Guidance

#### 650.3.1.2.1 General

(1) The contractor may substitute AMG for conventional staking on all or part of the work under the individual staking bid items. Coordinate with the engineer throughout the course of construction to ensure that work performed using AMG conforms to the contract tolerances and that the methods employed conform to the contractor's AMG work plan and accepted industry standards. Revert to conventional staking methods for all or part of the work at any point during construction if AMG is producing unacceptable results.

#### 650.3.1.2.2 AMG Work Plan

- (1) Submit a comprehensive written AMG work plan for department review at least 5 business days before the preconstruction conference. In that plan discuss how AMG technology will be integrated into other technologies employed on the project. List the staking bid items that will have work performed using AMG and, for each bid item listed, include the following:
  - 1. Designate which portions of the contract will be done using AMG and which portions will be done using conventional staking.
  - 2. Designate a single staff person as the primary contact for AMG technology issues.
  - 3. List and map the primary and secondary control points required under 105.6.2 enveloping the site.
  - 4. Describe the contractor's quality control procedures. Include the frequency and type of checks performed to ensure that the work conforms to the contract plans.
- (2) The engineer will review the plan to determine if it conforms to the contract. Do not perform AMG work until the engineer approves the governing portion of the AMG workplan. Perform the work as the contractor's AMG work plan provides. Update the plan as necessary.

## 650.3.1.2.3 Geometric and Surface Information

## 650.3.1.2.3.1 Department Responsibilities

(1) At any time after the contract is awarded the contractor may request the contractor data packet. The department will provide the packet within 5 business days of receiving the contractor's request.

#### 650.3.1.2.3.2 Contractor Responsibilities

- (1) Develop and maintain a contractor construction model for areas of the project employing AMG. Confirm that the resulting model agrees with the contract plans.
- (2) If the engineer requests, provide the construction model to the department in LandXML or other engineer-approved format.

#### 650.3.1.2.4 Managing and Updating Information

- (1) Notify the department of any errors or discrepancies in department-provided information. The department will determine what revisions may be required. The department will revise the contract plans, if necessary, to address errors or discrepancies that the contractor identifies. The department will provide the best available information related to those contract plan revisions.
- (2) Revise the construction model as required to support construction operations and to reflect any contract plan revisions the department makes. Perform checks to confirm that the revised construction model agrees with the contract plan revisions. If the engineer requests, provide construction model updates to the engineer. The department will pay for costs incurred to incorporate contract plan revisions as extra work.

#### 650.3.1.2.5 Construction Checks

- (1) Check the work against the plan elevation at randomly selected points on cross-sections located at stations evenly divisible by 100 at the frequency the engineer approved as a part of the AMG work plan. Submit the results of these random checks to the engineer daily. Notify the engineer immediately if a check exceeds the tolerances specified in 650.3.1.2.6 below.
- (2) Check the work at additional points as the engineer directs. The department may conduct periodic independent checks.

#### 650.3.1.2.6 Construction Tolerances

- (1) Ensure that the finished work vertically matches existing or other completed features. Ensure that the work conforms to revised plan elevations as follows:
  - Subgrade : +/- 0.10 feet.
  - Base: within the tolerance specified in 301.3.4.1(2).

#### 650.3.3 Subgrade

Retitle and replace the entire text with the following effective with the December 2018 letting:

#### 650.3.3 Subgrade Staking

(1) Set construction stakes or marks at intervals of 100 feet, or more frequently, for rural sections and at intervals of 50 feet, or more frequently, for urban sections. Include additional stakes at each cross-section as necessary to match the plan cross-section, achieve the required accuracy, and to support construction operations. Also set and maintain stakes as necessary to establish the horizontal and vertical positions of intersecting road radii, auxiliary lanes, horizontal and vertical curves, and curve transitions. Locate stakes to within 0.25 feet horizontally and establish the grade elevation to within 0.03 feet vertically.

### **Errata**

#### 520.3.3 Laying Pipe

Correct errata by replacing "sections" with "joints" to clarify the intent that the last 3 joints need ties.

(5) Provide joint ties on the upstream and downstream ends of circular and horizontal elliptical concrete culvert and concrete cattle pass installations. Tie the next 3 pipe joints or, if using apron endwalls, the endwall joint and the last 2 pipe joints. Ties are not required on culverts with masonry endwalls unless the plans show otherwise.

## 608.3.3 Laying Pipe

Correct errata by replacing "sections" with "joints" to clarify the intent that the last 3 joints need ties.

(5) Provide joint ties on concrete storm sewer system infall and outfall pipes. Tie the last 3 pipe joints or, if using apron endwalls, the endwall joint and the next 2 pipe joints. Ties are not required on installations with masonry endwalls unless the plans show otherwise.

## **ADDITIONAL SPECIAL PROVISION 7**

- A. Reporting 1<sup>st</sup> Tier and DBE Payments During Construction
  - 1. Comply with reporting requirements specified in the department's Civil Rights Compliance, Contractor's User Manual, Sublets and Payments.
  - 2. Report payments to all DBE firms within 10 calendar days of receipt of a progress payment by the department or a contractor for work performed, materials furnished, or materials stockpiled by a DBE firm. Report the payment as specified in A(1) for all work satisfactorily performed and for all materials furnished or stockpiled.
  - 3. Report payments to all first tier subcontractor relationships within 10 calendar days of receipt of a progress payment by the department for work performed. Report the payment as specified in A(1) for all work satisfactorily performed.
  - 4. All tiers shall report payments as necessary to comply with the DBE payment requirement as specified in A(2).
  - 5. Require all first tier relationships, DBE firms and all other tier relationships necessary to comply with the DBE payment requirement in receipt of a progress payment by contractor to acknowledge receipt of payment as specified in A(1), (2), (3) and (4).
  - 6. All agreements made by a contractor shall include the provisions in A(1), (2), (3), (4) and (5), and shall be binding on all first tier subcontractor relationships and all contractors and subcontractors utilizing DBE firms on the project.
- B. Costs for conforming to this special provision are incidental to the contract.

NOTE: CRCS Prime Contractor payment is currently not automated and will need to be manually loaded into the Civil Rights Compliance System. Copies of prime contractor payments received (check or ACH) will have to be forwarded to <a href="mailto:paul.ndon@dot.wi.gov">paul.ndon@dot.wi.gov</a> within 5 days of payment receipt to be logged manually.

\*\*\*Additionally, for information on Subcontractor Sublet assignments, Subcontractor Payments and Payment Tracking, please refer to the CRCS Payment and Sublets manual at:

 $\underline{https://wisconsindot.gov/Documents/doing-bus/civil-rights/labornwage/crcs-payments-sublets-\underline{manual.pdf}}$ 

# ADDITIONAL SPECIAL PROVISION 9-S Electronic Labor Data Submittal for State Funded Only Projects

(1) Use the Workforce Utilization Report Microsoft Excel spread sheet, or other compatible spread sheet (i.e., Google Spread Sheet), to report required labor data. Details and the Excel spreadsheet are available online through the department's highway construction contract information (HCCI) site on the Labor, Wages, and EEO Information page at:

## http://wisconsindot.gov/Pages/doing-bus/civil-rights/labornwage/default.aspx

- (2) Ensure that all tiers of subcontractors, including all trucking firms, submit their labor data electronically via the Excel spread sheet to the prime contractor within 14 calendar days of the end of each quarter (quarters are defined as January-March, April-June, July-September, and October-December). The prime contractor shall coordinate collection of their subcontractors' spread sheets and forward them to the Regional Labor Compliance Specialist within 21 calendar days of the end of each quarter. Every company or contractor providing physical labor towards completing the project is a subcontractor under this special provision.
- (3) Upon receipt of contract execution, promptly make all affected companies or contractors aware of the requirements under this special provision and arrange for them to receive an Excel spreadsheet as part of their subcontract documents.
- (4) The department will reject all paper submittals of information required under this special provision. All costs for conforming to this special provision are incidental to the contract.

# **Non-discrimination Provisions**

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

- **1. Compliance with Regulations:** The contractor (hereinafter includes consultants) will comply with the Acts and the Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, Federal Highway Administration, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.
- **2. Non-discrimination:** The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.
- **3. Solicitations for Subcontracts, Including Procurements of Materials and Equipment:** In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor's obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.
- **4. Information and Reports:** The contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the Federal Highway Administration to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the Recipient or the Federal Highway Administration, as appropriate, and will set forth what efforts it has made to obtain the information.
- **5. Sanctions for Noncompliance:** In the event of a contractor's noncompliance with the Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the Federal Highway Administration may determine to be appropriate, including, but not limited to:
  - a. Withholding payments to the contractor under the contract until the contractor complies; and/or
  - b. Cancelling, terminating, or suspending a contract, in whole or in part.

**6. Incorporation of Provisions:** The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor will take action with respect to any subcontract or procurement as the Recipient or the Federal Highway Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

# **Pertinent Non-Discrimination Authorities:**

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21.
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 et seq.), (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 et seq.), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 et seq.), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131-12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;
- The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);

- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures Non-discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of Limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq).

# **Effective August 2015 letting**

## **BUY AMERICA PROVISION**

All steel and iron materials permanently incorporated in this project shall be domestic products and all manufacturing and coating processes for these materials from smelting forward in the manufacturing process must have occurred within the United States. Coating includes epoxy coating, galvanizing, painting and any other coating that protects or enhances the value of a material subject to the requirements of Buy America. The exemption of this requirement is the minimal use of foreign materials if the total cost of such material permanently incorporated in the product does not exceed one-tenth of one percent (1/10 of 1%) of the total contract cost or \$2,500.00, whichever is greater. For purposes of this paragraph, the cost is that shown to be the value of the subject products as they are delivered to the project. The contractor shall take actions and provide documentation conforming to CMM 2-28.5 to ensure compliance with this "Buy America" provision.

# https://wisconsindot.gov/rdwy/cmm/cm-02-28.pdf

Upon completion of the project certify to the engineer, in writing using department form WS4567, that all steel, iron, and coating processes for steel or iron incorporated into the contract work conform to these "Buy America" provisions. Attach a list of exemptions and their associated costs to the certification form. Department form WS4567 is available at:

https://wisconsindot.gov/hcciDocs/contracting-info/ws4567.doc

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# **Proposal Schedule of Items**

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**Proposal ID:** 20181211029 **Project(s):** 3700-50-29, 3700-50-38

Federal ID(s): N/A, N/A

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0002	204.0165 Removing Guardrail	295.000 LF		<u> </u>
0004	204.0195 Removing Concrete Bases	12.000 EACH		
0006	213.0100 Finishing Roadway (project) 01. 3700- 50-29	1.000 EACH	·	·
0008	213.0100 Finishing Roadway (project) 02. 3700- 50-38	1.000 EACH	·	·
0010	614.0010 Barrier System Grading Shaping Finishing	2.000 EACH	·	·
0012	614.2300 MGS Guardrail 3	874.000 LF		
0014	614.2310 MGS Guardrail 3 HS	100.000 LF		·
0016	614.2610 MGS Guardrail Terminal EAT	2.000 EACH		
0018	614.2620 MGS Guardrail Terminal Type 2	2.000 EACH		
0020	616.0700.S Fence Safety	840.000 LF		
0022	618.0100 Maintenance And Repair of Haul Roads (project) 01. 3700-50-29	1.000 EACH	·	·
0024	618.0100 Maintenance And Repair of Haul Roads (project) 02. 3700-50-38	1.000 EACH		·
0026	619.1000 Mobilization	1.000 EACH		
0028	625.0500 Salvaged Topsoil	1,000.000 SY		<u> </u>
0030	627.0200 Mulching	1,000.000 SY	·	







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**Proposal ID:** 20181211029 **Project(s):** 3700-50-29, 3700-50-38

Federal ID(s): N/A, N/A

**SECTION:** 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0032	628.1504 Silt Fence	1,350.000 LF		
0034	628.1520 Silt Fence Maintenance	1,350.000 LF	·	
0036	628.1905 Mobilizations Erosion Control	6.000 EACH		
0038	628.1910  Mobilizations Emergency Erosion Control	5.000 EACH		
0040	628.7010 Inlet Protection Type B	12.000 EACH		
0042	628.7015 Inlet Protection Type C	15.000 EACH		
0044	628.7020 Inlet Protection Type D	22.000 EACH		
0046	628.7504 Temporary Ditch Checks	120.000 LF		
0048	629.0210 Fertilizer Type B	1.000 CWT		
0050	630.0130 Seeding Mixture No. 30	21.000 LB		
0052	630.0200 Seeding Temporary	30.000 LB		
0054	634.0616 Posts Wood 4x6-Inch X 16-FT	1.000 EACH		
0056	635.0200 Sign Supports Structural Steel HS	2,028.000 LB		
0058	636.0100 Sign Supports Concrete Masonry	5.000 CY		
0060	636.1000 Sign Supports Steel Reinforcement HS	270.000 LB	<u> </u>	
0062	637.2210 Signs Type II Reflective H	158.000 SF		
0064	638.2102 Moving Signs Type II	2.000 EACH		







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**Proposal ID:** 20181211029 **Project(s):** 3700-50-29, 3700-50-38

Federal ID(s): N/A, N/A

**SECTION:** 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0066	642.5001 Field Office Type B	1.000 EACH	·	<u> </u>
0068	643.0300 Traffic Control Drums	5,850.000 DAY		
0070	643.0420 Traffic Control Barricades Type III	475.000 DAY	<u> </u>	·
0072	643.0705 Traffic Control Warning Lights Type A	940.000 DAY	<u>-</u>	
0074	643.0715 Traffic Control Warning Lights Type C	1,430.000 DAY	<u>-</u>	·
0076	643.0800 Traffic Control Arrow Boards	40.000 DAY	<u></u>	·
0078	643.0900 Traffic Control Signs	1,630.000 DAY	<u></u>	
0800	643.0910 Traffic Control Covering Signs Type I	4.000 EACH	<u>-</u>	
0082	643.1050 Traffic Control Signs PCMS	190.000 DAY	<u>-</u>	·
0084	643.5000 Traffic Control	1.000 EACH	<u>-</u>	
0086	646.1545 Marking Line Grooved Wet Ref Contrast Epoxy 4-Inch	405.000 LF	·	·
8800	646.3020 Marking Line Epoxy 8-Inch	55.000 LF	<u></u>	·
0090	646.3545  Marking Line Grooved Wet Ref Contrast Epoxy 8-Inch	255.000 LF		
0092	646.9010 Marking Removal Line Water Blasting 4- Inch	405.000 LF	·	·
0094	646.9110 Marking Removal Line Water Blasting 8- Inch	315.000 LF	<u>.                                    </u>	







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**Proposal ID:** 20181211029 **Project(s):** 3700-50-29, 3700-50-38

Federal ID(s): N/A, N/A

**SECTION:** 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0096	649.0150 Temporary Marking Line Removable Tape 4-Inch	1,590.000 LF	<del></del>	
0098	649.0250 Temporary Marking Line Removable Tape 8-Inch	55.000 LF	<u>-</u>	<u> </u>
0100	650.6500 Construction Staking Structure Layout (structure) 01. DMS-18-0036	LS	LUMP SUM	·
0102	650.8500 Construction Staking Electrical Installations (project) 01. 3700-50-29	LS	LUMP SUM	
0104	650.8500 Construction Staking Electrical Installations (project) 02. 3700-50-38	LS	LUMP SUM	·
0106	650.9910 Construction Staking Supplemental Control (project) 01. 3700-50-29	LS	LUMP SUM	
0108	650.9910 Construction Staking Supplemental Control (project) 02. 3700-50-38	LS	LUMP SUM	·
0110	652.0225 Conduit Rigid Nonmetallic Schedule 40 2-Inch	390.000 LF	:	·
0112	652.0235 Conduit Rigid Nonmetallic Schedule 40 3-Inch	373.000 LF	<del>.</del>	
0114	652.0605 Conduit Special 2-Inch	296.000 LF		
0116	652.0700.S Install Conduit into Existing Item	15.000 EACH		
0118	653.0164 Pull Boxes Non-Conductive 24x42-Inch	6.000 EACH	<u> </u>	<u> </u>
0120	654.0113 Concrete Bases Type 13	14.000 EACH		
0122	654.1150 Concrete Bases Camera Pole 50-FT	1.000 EACH		







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**Proposal ID:** 20181211029 **Project(s):** 3700-50-29, 3700-50-38

Federal ID(s): N/A, N/A

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0124	655.0230 Cable Traffic Signal 5-14 AWG	5,644.000 LF		<u> </u>
0126	655.0240 Cable Traffic Signal 7-14 AWG	44.000 LF	·	
0128	655.0515 Electrical Wire Traffic Signals 10 AWG	4,209.000 LF		
0130	655.0610 Electrical Wire Lighting 12 AWG	432.000 LF	·	
0132	655.0625 Electrical Wire Lighting 6 AWG	1,482.000 LF		
0134	655.0900 Traffic Signal EVP Detector Cable	5,423.000 LF		
0136	656.0200 Electrical Service Meter Breaker Pedestal (location) 01. DMS-18-0036	LS	LUMP SUM	
0138	656.0500 Electrical Service Breaker Disconnect Box (location) 01. DMS-18-0036	LS	LUMP SUM	·
0140	656.0500 Electrical Service Breaker Disconnect Box (location) 02. CCTV-18-0046	LS	LUMP SUM	·
0142	657.0100 Pedestal Bases	2.000 EACH	·	
0144	657.0355 Poles Type 12	12.000 EACH		
0146	657.0360 Poles Type 13	2.000 EACH		
0148	657.0425 Traffic Signal Standards Aluminum 15-FT	2.000 EACH		
0150	657.0540 Monotube Arms 40-FT	1.000 EACH		
0152	657.0545 Monotube Arms 45-FT	4.000 EACH		
0154	657.0550 Monotube Arms 50-FT	8.000 EACH	<u> </u>	







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**Proposal ID:** 20181211029 **Project(s):** 3700-50-29, 3700-50-38

Federal ID(s): N/A, N/A

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0156	657.0555 Monotube Arms 55-FT	1.000 EACH		
0158	658.0173 Traffic Signal Face 3S 12-Inch	28.000 EACH	·	
0160	658.0174 Traffic Signal Face 4S 12-Inch	2.000 EACH		
0162	658.5069 Signal Mounting Hardware (location) 01. STH 312 & Truax Ln	LS	LUMP SUM	
0164	658.5069 Signal Mounting Hardware (location) 02. STH 312 & Mill Run Rd	LS	LUMP SUM	
0166	658.5069 Signal Mounting Hardware (location) 03. STH 312 & CTH TT	LS	LUMP SUM	
0168	658.5069 Signal Mounting Hardware (location) 04. USH 12 & Brakke Dr	LS	LUMP SUM	
0170	658.5069 Signal Mounting Hardware (location) 05. USH 12 & CTH UU	LS	LUMP SUM	
0172	658.5069 Signal Mounting Hardware (location) 06. STH 64 & STH 65	LS	LUMP SUM	
0174	670.0100 Field System Integrator	LS	LUMP SUM	·
0176	670.0200 ITS Documentation	LS	LUMP SUM	<del></del>
0178	673.0225.S Install Pole Mounted Cabinet	2.000 EACH		
0180	677.0150 Install Camera Pole 50-FT	1.000 EACH		
0182	677.0200 Install Camera Assembly	1.000 EACH		
0184	678.0600 Install Ethernet Switches	2.000 EACH	<u> </u>	<u> </u>



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# **Proposal Schedule of Items**

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**Proposal ID:** 20181211029 **Project(s):** 3700-50-29, 3700-50-38

Federal ID(s): N/A, N/A

**SECTION:** 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0186	678.0800 Install Cellular Modems	1.000 EACH	·	·
0188	SPV.0060 Special 001. Install Ground Mounted DMS Full Matrix	1.000 EACH		
0190	SPV.0060 Special 002. Install Wireless Ethernet Bridge	2.000 EACH	·	
0192	SPV.0060 Special 003. Luminaire Arms Single Member 15 5/8-Inch Clamp 15-FT	2.000 EACH	·	
0194	SPV.0090 Special 001. Sawing Curb Head	352.000 LF		
0196	SPV.0105 Special 001. Install State Furnished EVP Detector Heads STH 312 & Truax Ln	LS	LUMP SUM	·
0198	SPV.0105 Special 002. Install State Furnished EVP Detector Heads STH 312 & Mill Run Rd	LS	LUMP SUM	
0200	SPV.0105 Special 003. Install State Furnished EVP Detector Heads STH 312 & CTH TT	LS	LUMP SUM	
0202	SPV.0105 Special 004. Install State Furnished EVP Detector Heads USH 12 & Brakke Dr	LS	LUMP SUM	<u> </u>
0204	SPV.0105 Special 005. Install State Furnished EVP Detector Heads USH 12 & CTH UU	LS	LUMP SUM	·
0206	SPV.0105 Special 006. Install State Furnished EVP Detector Heads STH 64 & STH 65	LS	LUMP SUM	·
0208	SPV.0105 Special 007. Remove Traffic Signals STH 312 & Truax Ln	LS	LUMP SUM	
0210	SPV.0105 Special 008. Remove Traffic Signals STH 312 & Mill Run Rd	LS	LUMP SUM	



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# **Proposal Schedule of Items**

**Proposal ID:** 20181211029 **Project(s):** 3700-50-29, 3700-50-38

Federal ID(s): N/A, N/A

**SECTION:** 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0212	SPV.0105			
	Special 009. Remove Traffic Signals STH 312 & CTH TT	LS	LUMP SUM	
0214	SPV.0105			
	Special 010. Remove Traffic Signals USH 12 & Brakke Dr	LS	LUMP SUM	<u> </u>
0216	SPV.0105			
	Special 011. Remove Traffic Signals USH 12 & CTH UU	LS	LUMP SUM	
0218	SPV.0105			
	Special 012. Remove Traffic Signals STH 64 & STH 65	LS	LUMP SUM	·
	Section:	0001	Total:	<u> </u>
			Total Bid:	

# PLEASE ATTACH SCHEDULE OF ITEMS HERE