

HIGHWAY WORK PROPOSAL

Wisconsin Department of Transportation
DT1502 10/2010 s.66.29(7) Wis. Stats.

Proposal Number:

14

<u>COUNTY</u>	<u>STATE PROJECT ID</u>	<u>FEDERAL PROJECT ID</u>	<u>PROJECT DESCRIPTION</u>	<u>HIGHWAY</u>
Dane	5992-09-69		Milwaukee Street, City of Madison (Fair Oaks Avenue Intersection)	Local Street
Dane	5992-09-71		Milwaukee Street, City of Madison (East Branch Starkweather Creek Bridge, B-13-0677)	Local Street

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, \$ 75,000.00 Payable to: Wisconsin Department of Transportation	Attach Proposal Guaranty on back of this PAGE.
Bid Submittal Due Date: May 12, 2015 Time (Local Time): 9:00 AM	Firm Name, Address, City, State, Zip Code
Contract Completion Time October 30, 2015	SAMPLE NOT FOR BIDDING PURPOSES
Assigned Disadvantaged Business Enterprise Goal 0%	This contract is exempt from federal oversight.

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.

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)

(Date Commission Expires)

Notary Seal

(Bidder Signature)

(Print or Type Bidder Name)

(Bidder Title)

For Department Use Only

Type of Work Common excavation, base aggregate, HMA pavement, pavement marking, storm sewer, concrete curb and gutter, concrete sidewalk, traffic signals, street lights, sanitary sewer, water main, Structure B-13-0677.	Date Guaranty Returned
Notice of Award Dated	

**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.

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 the internet.
 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 <http://www.dot.wisconsin.gov/business/engrserv/bid-letting-information.htm>. 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 P.M. local time on the Thursday before the letting. Check the department's web site after 5:00 P.M. 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™ on-line bidding exchange at <http://www.bidx.com/> after 5:00 P.M. 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™ 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 <http://www.dot.wisconsin.gov/business/engrserv/bid-letting-information.htm> 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, Room 601, 4802 Sheboygan Avenue, Madison, WI, during regular business hours.

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™ web site.
 2. Use Expedite™ software to enter a unit price for every item in the schedule of items.
 3. Submit the bid according to the requirements of Expedite™ software and the Bid Express™ 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.
 5. 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™ web site reflecting the latest addenda posted on the department's web site at <http://www.dot.wisconsin.gov/business/engrserve/bid-letting-information.htm>. Use Expedite™ 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™ 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™ generated schedule of items on a 3 1/2 inch computer diskette or CD ROM. Label each diskette or CD ROM with 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™ 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™ generated schedule of items is not the same on each page.
 2. The check code printed on the printout of the Expedite™ 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 Corporate Seal)**

(Signature and Title)

(Company Name)

(Signature and Title)

(Company Name)

(Signature and Title)

(Company Name)

(Signature and Title)

NOTARY FOR PRINCIPAL

(Date)

State of Wisconsin)
) ss.
_____ County)

On the above date, this instrument was acknowledged before me by the named person(s).

(Signature, Notary Public, State of Wisconsin)

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

(Date Commission Expires)

Notary Seal

(Name of Surety) **(Affix Seal)**

(Signature of Attorney-in-Fact)

NOTARY FOR SURETY

(Date)

State of Wisconsin)
) ss.
_____ County)

On the above date, this instrument was acknowledged before me by the named person(s).

(Signature, Notary Public, State of Wisconsin)

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

(Date Commission Expires)

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 Contractor	
Certificate Holder	Wisconsin Department of Transportation

This is to certify that an annual bid bond issued by the above-named Surety is currently on file with the Wisconsin Department of Transportation.

This certificate is issued as a matter of information and conveys no rights upon the certificate holder and does not 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.

[illegible]

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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SPECIAL PROVISIONS

1. General.

Perform the work under this construction contract for Project 5992-09-69 Milwaukee Street, City of Madison (Fair Oaks Avenue Intersection), Local Street, Dane County and Project 5992-09-71, Milwaukee Street, City of Madison, (East Branch Starkweather Creek Bridge, B-13-0677), Local Street, Dane 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, 2015 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 (20141107)

2. Scope of Work.

The work under this contract shall consist of common excavation, base aggregate, HMA pavement, pavement marking, storm sewer, concrete curb and gutter, concrete sidewalk, traffic signals, street lights, sanitary sewer, water main, cut stone boulders, removing sheet piling, Structure B-13-0677, 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.

Provide the City of Madison one week notice prior to beginning the removal of the bridge. The City of Madison will remove the existing asphalt and steel plates on the existing bridge deck. Coordinate with Jim Martinson at (608) 267-1973.

Fish Spawning

There shall be no instream disturbance of East Branch Starkweather Creek as a result of construction activity under or for this contract, from March 1 to June 15 both dates inclusive, in order to avoid adverse impacts upon the fish spawning.

Any change to this limitation will require submitting a written request by the contractor to the engineer, subsequent review and concurrence by the Department of Natural Resources in the request, and final approval by the engineer. The approval will include all conditions to the request as mutually agreed upon by WisDOT and DNR.

Migratory Birds

Swallow and other migratory birds' nests have been observed on or under the existing bridge. All active nests (when eggs or young are present) of migratory birds are protected under the federal Migratory Bird Treaty Act.

The nesting season for swallows and other birds is usually between May 1 and August 30. Either prevent active nests from becoming established, or apply for a depredation permit from the US Fish and Wildlife Service for work that may disturb or destroy active nests. The need for a permit may be avoided by removing the existing bridge structure prior to nest occupation by birds, or clearing nests from all structures before the nests become active in early spring. As a last resort, prevent birds from nesting by installing a suitable netting device on the remaining structure prior to nesting activity. Include the cost for preventing nesting in the cost of Removing Old Structure Over Waterway with Minimal Debris.

The City of Madison will prevent nesting until the construction contract is executed.

Milwaukee Street and Fair Oaks Avenue are part of the Madison Metro bus routes. Contact Madison Metro two weeks prior to the start of construction to allow time for Madison Metro to advertise bus route changes during construction. The contact person for Madison Metro is Tim Sobota at (608) 266-4904.

The contractor is advised to mobilize construction equipment that is a size suitable for maneuvering in the limited area throughout the project. There are many movement limitations both horizontally and vertically in the project limits (trees, overhead wires, poles, etc). The contractor is responsible for any damage done to objects inside the project limits.

4. Traffic.

Milwaukee Street, east of Fair Oaks Avenue, will be closed to through traffic. A detour route will be posted as a part of the project. The detour route will be Fair Oaks Avenue to STH 30 to USH 51 to Milwaukee Street. Institute the detour route at the completion of Stage 1B.

Notify the City of Madison Police Department, Fire Department, Madison Metro Transit, and the Post Office a minimum of 14 calendar days prior to closing Milwaukee Street.

Stage Milwaukee Street west of Fair Oaks Avenue and Fair Oaks Avenue during construction to maintain a single lane of traffic in each direction with the exception of Stage 1B. Maintain ADA access for pedestrians and bikes through the intersection. Existing curb ramps can be removed at any time as long as Temporary Cross Walk Access is constructed and maintained.

Maintain an accessible route for emergency vehicles at all times through the intersection of Milwaukee Street and Fair Oaks Avenue. Provide local traffic vehicle access on a paved or compacted aggregate base course surface of 10' minimum width for emergency vehicles, delivery vehicles, and refuse haulers. Use appropriate traffic control devices, including traffic control drums, warning lights, and barricades to delineate the access and protect the remainder of the worksite.

Maintain access to the entrance located at Station 12+65, LT. Maintain access to the gas station on the southeast quadrant from at least one entrance at all times. Do not close driveways without providing access to their other driveway(s). Maintain access to private driveways within the project limits. Coordinate with the property owners for temporary closures.

Place select crushed material or base aggregate dense on the same day as excavation. Provide a temporary 3:1 sloped wedge in areas that will have greater than a 6-inch drop for more than three calendar days. At the end of each day, place base aggregate dense to provide a ramp to the entrances.

Stage 1

Stage 1A

The contractor may request on-street parking restrictions on Milwaukee Street between Bryan Street and Fair Oaks Avenue during Stage 1A work. Coordinate removal of parking on Milwaukee Street with the City of Madison Police Department.

Complete the water main cut-in connection at Station 4+21.5, RT and extend the new water main to the north beyond the centerline of Milwaukee Street. Perform this work utilizing flagging to maintain eastbound and westbound traffic on Milwaukee Street.

Close the center of Milwaukee Street at the west end of the project limits to facilitate bypass pumping at Manhole SAS 6139-018, Station 4+34. Maintain a single lane of traffic in each direction on Milwaukee Street.

Close the northern half of Milwaukee Street at the intersection with southbound Fair Oaks Avenue from Station 7+50 to Station 8+50. Close southbound Fair Oaks Avenue at Wells Avenue. Prohibit truck traffic from utilizing southbound Fair Oaks Avenue at the Fair Oaks/STH 30 interchange. Maintain all other traffic lanes and turn lanes in the intersection that are not affected by the closure. Complete the sanitary sewer connection to MMSD MH06-209, sanitary sewer main, and sanitary sewer lateral.

The eastern leg of the Milwaukee Street and Fair Oaks intersection will remain open for the duration of this stage.

Stage 1B:

The contractor may request on-street parking restrictions on Milwaukee Street between Bryan Street and Fair Oaks Avenue during Stage 1B work. Coordinate removal of parking on Milwaukee Street with the City of Madison Police Department.

Close the northern half of Milwaukee Street west of Fair Oaks Avenue including Powers Avenue. Maintain a single lane of traffic in the eastbound direction for the duration of this stage. Westbound traffic to the west of Fair Oaks Avenue will be closed for the duration of this stage. Complete sanitary sewer main and northern sanitary laterals.

The eastern leg of the Milwaukee Street and Fair Oaks intersection will remain open for the duration of this stage.

Stage 2

Close the north half of Milwaukee Street west of Fair Oaks Avenue including Powers Avenue. Close a portion of the southbound travel lanes on Fair Oaks Avenue north of Milwaukee Street. Maintain a single lane of traffic in each direction. Complete water main, storm sewer, lighting, grading, base aggregate, curb and gutter, asphalt paving binder course, and signal work.

Reduction of traffic to a single lane on Milwaukee Street west of Fair Oaks Avenue will be permitted on a limited basis during non-peak hours. Utilize flagging to maintain eastbound and westbound traffic.

Stage 3

Close southern half of Milwaukee Street west of Fair Oaks Avenue. Close the western half of Fair Oaks Avenue. Maintain a single lane in each direction. Complete storm sewer, sanitary sewer laterals, grading, base aggregate, curb and gutter, asphalt paving binder course, lighting, and signal work.

Reduction of traffic to a single lane on Milwaukee Street west of Fair Oaks Avenue will be permitted on a limited basis during non-peak hours. Utilize flagging to maintain eastbound and westbound traffic.

Reduction of traffic to a single lane on Fair Oaks Avenue south of Milwaukee Street will be permitted on a limited basis during non-peak hours in order to make connections to the water main and storm sewer systems. Utilize flagging to maintain northbound and southbound traffic.

Milwaukee Street east of Fair Oaks Avenue will remain closed through the duration of this stage.

Stage 4

Milwaukee Street west of Fair Oaks Avenue is fully open in both directions. Close the eastern half of Fair Oaks Avenue within the project limits. Maintain a single lane of traffic in both directions. Complete water main, storm sewer, grading, base aggregate, curb and gutter, asphalt paving binder course, lighting, and signal work.

Reduction of traffic to a single lane on Fair Oaks Avenue south of Milwaukee Street will be permitted on a limited basis during non-peak hours in order to make connections to the water main and storm sewer systems. Utilize flagging to maintain northbound and southbound traffic.

Milwaukee Street east of Fair Oaks Avenue will remain closed through the duration of this stage.

Stage 5

Close the center of Fair Oaks Avenue within the project limits. Maintain a single lane in each direction. Complete the center median from Station 204+14 to Station 204+60.

Milwaukee Street east of Fair Oaks Avenue will remain closed through the duration of this stage.

Stage 6

Complete any final paving and marking under traffic with flagging operations.

5. Utilities.

This contract does not come under the provision of Administrative Rule Trans 220. 107-065 (20080501)

There are underground and overhead facilities located within the project limits. There are known utility adjustments required for the construction project as noted below. Contractor shall coordinate construction activities with Diggers Hotline and shall directly contact the utilities, which have facilities in the area as required per statutes. Use caution to ensure the integrity of underground facilities and maintain code clearances from overhead facilities at all times.

Bidders are advised to contact each utility company listed in the plans, prior to preparing their bids, to obtain current information on the status of any utility relocation work stated herein.

MG&E – Electric

Overhead lines run east/west along the north side of Milwaukee Street east of Fair Oaks Avenue. At the intersection of Milwaukee Street with Fair Oaks the overhead cross over to the south side of the roadway and continues to the west. Overhead lines run north/south along the east side of Fair Oaks Avenue. Overhead lines cross Milwaukee Street at various locations within the project limits.

Prior to the start of construction MG&E will joint bore with AT&T on the south side of Milwaukee Street and remove poles and overhead facilities between Station 8+50, LT to Station 11+95, LT along the north side of Milwaukee Street. MG&E will cross underground at approximately Station 13+15 to the south side of Milwaukee Street and bore under the creek towards the west. New power poles will be installed at Station 8+40, RT and Station 8+75, RT. MG&E will relocate power poles located at Station 6+00 RT and Station 8+50 RT to meet lateral clearance requirements. MGE will replace the pole at 7+00 LT. A new pole with a sidewalk guy will be set at about 7+15 left. The pole at 9+55 right will be removed.

MG&E – Gas

An existing gas main runs east/west along the north sidewalk of Milwaukee Street to the Fair Oaks Avenue intersection and continues to the north along the west side of Fair Oaks Avenue. The main crosses Fair Oaks Avenue at Station 206+35 where it splits and continues north on Fair Oaks on the east side and southeast along the north side of Milwaukee Street. The gas main also splits and crosses Milwaukee Street at Station 6+80 heading south along the west side of Fair Oaks Avenue. Gas laterals cross Milwaukee Street at several locations within the project limits.

Prior to the start of construction MG&E will disconnect the existing gas main and move the new gas main to the north as close to the right-of-way as possible at an elevation of approximately 835.00.

AT&T

Buried telephone runs east/west along the south side of Milwaukee Street from Station 4+20 to Station 12+40. AT&T has overhead facilities along the north side of Milwaukee Street from Station 9+50 to Station 12+40 that cross to the south at Fair Oaks Avenue. There are various crossings within the project limits.

Prior to the start of construction, AT&T will remove all overhead facilities within the bridge project limits. AT&T will relocate their existing underground facilities by boring new facilities to an elevation between 825.00 – 830.00 across the stream bed to avoid conflict with the riprap and sheet pile removal. Once the new facilities are east and west of the stream channel, the facilities will rise in elevation to between 845.00 – 850.00 on the west where a new manhole will be installed at approximately Station 8+70, RT. On the east, AT&T will be replacing facilities to a manhole located to the east of Leon Street, outside of the project limits.

AT&T will be placing new buried facilities from the new manhole located at Station 8+70, RT extending to the north across Milwaukee Street and continuing along the eastern right-of-way of Fair Oaks Avenue to the north. These facilities will terminate at an MG&E power pole located at approximately Station 206+75, RT near the northern Fair Oaks project limits

AT&T will be placing new buried facilities from the new manhole located at Station 8+70, RT extending to the south beneath the southern sidewalk of Milwaukee Street and eastern sidewalk on Fair Oaks Avenue. These facilities will terminate at an MG&E power pole located at approximately Station 204+00, RT.

An existing buried facility located at Station 5+00, LT (northwest quadrant of Powers Avenue) crosses to the southeast to connect into the main duct package. AT&T will be lowering these facilities to the north of the reference line.

AT&T will be relocate and bore new facilities along the southern edge of Milwaukee Street to the north of Powers Avenue. AT&T will install a new pedestal adjacent to the power pole located at Station 5+20, RT. From there, AT&T will relocate their facilities parallel to the existing facilities shifted just north at a minimum depth of 36 inches. This work will extend to the west beyond the project limits.

Charter Communications

Charter's facilities are located on MG&E's poles.

Prior to the start of construction Charter will remove overhead facilities on the north side of Milwaukee Street from Station 8+50 to Station 11+95. Charter will joint bore with AT&T and MG&E. Charter will cross underground to the south side of Milwaukee Street at Station 11+95, LT. Charter will re-establish aerial facilities on MG&E's new poles at approximately 8+40, RT and 8+75, RT.

US Signal

US Signals facilities are located on MG&E's poles.

Prior to the start of construction US Signal will remove overhead facilities on the north side of Milwaukee Street from Station 8+50 to Station 11+00, LT. US Signal will joint bore with AT&T, Charter, and MG&E. US Signal will cross underground to the south side of Milwaukee Street at Station 13+25, LT. A new US Signal hand hole will be installed at approximately Station 8+55, RT. US Signal will bore under the intersection of Fair Oaks Avenue and Milwaukee Street to the west and re-establish aerial facilities on MG&E's pole at approximately 6+00, RT.

Madison Metropolitan Sewerage District

The sanitary sewer extends from a manhole located at Station 8+33, 18' LT to the south along the eastern curb line of Fair Oaks Avenue.

Conflict is not anticipated with Madison Metropolitan Sewerage District. The contract includes work to adjust a sanitary sewer manhole locate at the intersection of Fair Oaks and Milwaukee Street. MMSD will supply the casting and the rubber adjustment ring.

Waunona Sanitary District#2

Sanitary Sewer:

The sanitary sewer extends from a manhole located at Station 8+33, 18' LT to the north along the Fair Oaks Avenue centerline.

Water main:

Water main extends from the water meter pit located just north of Milwaukee Street in the northbound lanes of Fair Oaks Avenue to the north along the eastern curb line of Fair Oaks Avenue.

Conflict is not anticipated with Waunona Sanitary District#2.

City of Madison

Sanitary Sewer:

An 8-Inch main runs east from a sanitary sewer manhole is located at Station 4+35 to a manhole a Station 8+33. There are sanitary sewer laterals located at Stations; 4+32, LT; 4+33, RT; 4+80, RT; 4+83, LT; 5+17, RT; 5+53, RT; 5+75, LT; 5+94, RT; 6+15, LT, 6+35, RT; 6+73, RT; 6+77, LT; 7+33, LT; 7+99, LT.

The proposed sanitary sewer work is included as a part of this contract.

Water main:

Water main runs east/ west along Milwaukee Street west of Fair Oaks Avenue. The water main splits at Station 8+30 and continues southeast to cross the creek south of the existing structure before bending east to continue beneath the eastbound travel lane of Milwaukee Street. The other main runs to the northeasterly from Station 8+30 to a water meter pit that is connected to Waunona Sanitary District#2. There is also a tee at Station 7+90 where water main continues to the southwest along Fair Oaks Avenue.

Fire hydrants are located at Station 5+32, 37' LT, 12+30, 22' LT, 206+17, 31' RT.

The proposed water main work is included as a part of this contract.

Signals/Lighting:

Existing signal conduit connects to each of the loops at the intersection of Fair Oaks Avenue and Milwaukee Street. Existing lighting conduit extends from the intersection along the north side of Milwaukee Street to the east and west of the intersection.

The proposed signal conduit, pull wire, loop detectors, and bases are included as a part of this contract. New traffic signal conduit, pull wires, loop detectors, and bases will be installed on the west, south, and east legs of the intersection of Fair Oaks Avenue and Milwaukee Street. New signal bases will be installed at Station 8+64, RT, 8+53, RT, 7+34,

RT, 205+44 LT, 8+64, LT. Coordinate with the City of Madison for installation of signals and poles.

The proposed lighting conduit, pull wires, and bases are included as a part of this contract. New lighting conduit, wire, and bases will be installed on all quadrants of the intersection. New light pole bases will be located at Station 6+44, LT, 7+77, LT, 203+76, RT, 205+76, RT, 204+76, RT, 9+16, RT, 10+67, RT, 11+99, LT. Coordinate with the City of Madison for installation light poles.

6. Municipality Acceptance of Sanitary Sewer and Water Main Construction.

Both the department and City of Madison personnel will inspect construction of sanitary sewer and water main under this contract. However, testing, and acceptance of the sanitary sewer and water main construction will be by the City of Madison.

7. Referenced Construction Specifications.

Construct the sanitary sewer and water main work conforming to the City of Madison Standard Specifications for Public Works Construction-Latest Edition (City Standard Specifications). If there is a discrepancy or conflict between the referenced specification and the standard specifications regarding contract administration, part 1 of the standard specifications governs.

8. Information to Bidders, U.S. Army Corps of Engineers Section 404 Permit.

The department has obtained a U.S. Army Corps of engineers Section 404 permit. Comply with the requirements of the permit in addition to requirements of the special provisions. A copy of the permit is available from the regional office by contacting Scott LaCoursiere, P.E. at (608) 243-6471.
107-054 (20080901)

9. Environmental Protection, Aquatic Exotic Species Control.

Exotic invasive organisms such as VHS, zebra mussels, purple loosestrife, and Eurasian water milfoil are becoming more prolific in Wisconsin and pose adverse effects to waters of the state. Wisconsin State Statutes 30.07, "Transportation of Aquatic Plants and Animals; Placement of Objects in Navigable Waters", details the state law that requires the removal of aquatic plants and zebra mussels each time equipment is put into state waters.

At construction sites that involve navigable water or wetlands, use the follow cleaning procedures to minimize the chance of exotic invasive species infestation. Use these procedures for all equipment that comes in contact with waters of the state and/or infested water or potentially infested water in other states.

Ensure that all equipment that has been in contact with waters of the state, or with infested or potentially infested waters, has been decontaminated for aquatic plant materials and zebra mussels prior to being used in other waters of the state. Before using equipment on this project, thoroughly disinfect all equipment that has come into contact with potentially infested waters. Use the following inspection and removal procedures (guidelines from the Wisconsin Department of Natural Resources http://dnr.wi.gov/topic/fishing/documents/vhs/disinfection_protocols.pdf for disinfection:

- Prior to leaving the contaminated site, wash machinery and ensure that the machinery is free of all soil and other substances that could possibly contain exotic invasive species;
- Drain all water from boats, trailers, bilges, live wells, coolers, bait buckets, engine compartments, and any other area where water may be trapped;
- Inspect boat hulls, propellers, trailers and other surfaces. Scrape off any attached mussels, remove any aquatic plant materials (fragments, stems, leaves, seeds, or roots), and dispose of removed mussels and plant materials in a garbage can prior to leaving the area or invested waters; and
- Disinfect your boat, equipment and gear by either:
 - Washing with ~212° F water (steam clean), or
 - Drying thoroughly for five days after cleaning with soap and water and/or high pressure water, or
 - Disinfecting with either 200 ppm (0.5 oz per gallon or 1 Tablespoon per gallon) Chlorine for 10-minute contact time or 1:100 solution (38 grams per gallon) of Virkon Aquatic for 20- to 30-minute contact time. Note: Virkon is not registered to kill zebra mussel veligers nor invertebrates like spiny water flea. Therefore this disinfect should be used in conjunction with a hot water (>104° F) application.

Complete the inspection and removal procedure before equipment is brought to the project site and before the equipment leaves the project site.

107-055 (20130615)

10. Erosion Control Structures.

Within seven calendar days after the commencement of work on the bridge superstructure, place all permanent erosion control devices, including riprap, erosion mat, ditch checks, seed, fertilizer, mulch, soil stabilizer, or any other item required by the contract or deemed necessary by the engineer. These devices shall be in place in the area under the bridge and on both sides of the roadway, from the waterway to a point 100-feet behind the backwall of the abutment. Within said limits, place these devices to a height equivalent to the calculated water elevation resulting from a storm that occurs on the average of once every two years (Q2) as shown on the plan, or as directed by the engineer. Prior to initial construction operations, place turbidity barriers, silt screens, and other temporary erosion control measures as shown on the plans, and remove them after the permanent erosion control devices are in place unless directed otherwise by the engineer.

In the event that construction activity does not disturb the existing ground below the Q2 elevation, the above timing requirements for permanent erosion control shall be waived.
107-070 (20030820)

11. Notice to Contractor, Notification of Demolition and/or Renovation No Asbestos Found.

John Roelke, License Number AII-119523, inspected Structure B-13-0033 for asbestos on March 6, 2013. No regulated Asbestos Containing Material (RACM) was found on this structure. A copy of the inspection report is available from: Scott LaCoursiere, P.E., (608) 243-6471.

In accordance with NR447 and DHS159, ensure that DNR or DHS receives a completed Notification of Demolition and/or Renovation (DNR Form 4500-113 (R 4/11), or subsequent revision) via U.S. mail, hand-delivery, or using the online notification system at least 10 working days prior to beginning any construction or demolition. Pay all associated fees. Provide a copy of the completed 4500-113 form to Scott LaCoursiere, P.E. (608) 243-6471 and DOT BTS-ESS attn: Hazardous Materials Specialist PO Box 7965, Madison, WI. 53707-7965. In addition, comply with all local or municipal asbestos requirements.

Use the following information to complete WisDNR form 4500-113 :

- Site Name: Structure B-13-0033, Milwaukee Street over East Branch Starkweather Creek
- Site Address: Lat: 43°05'57.80"N Long: 89°19'54.00"W Sec 05 T7N R10E, City of Madison
- Ownership Information: City of Madison, Department of Public Works, City-County Building, 210 Martin Luther King Jr. Boulevard, Madison, Wisconsin 53703
- Contact: Scott LaCoursiere, P.E., OTIE, 5100 Eastpark Blvd., Suite 200, Madison, WI 53718 (608) 243-6471
- Phone: (608) 243-6471
- Age: 63 years old. This structure was constructed in 1952.
- Area: 1469 SF of deck

Insert the following paragraph in Section 6.g.:

- If asbestos not previously identified is found or previously non-friable asbestos becomes crumbled, pulverized, or reduced to a powder, stop work immediately, notify the engineer, and the engineer will notify the department's Bureau of Technical Services at (608) 266-1476 for an emergency response in accordance to standard spec 107.24. Keep material wet until it is abated or until it is determined to be non-asbestos containing material.

107-125 (20120615)

12. Dust Abatement.

Supplement standard spec 104.6.1 with the following;

Dry brooming of the pavement will not be allowed.

When engaged in roadway cleaning operations, use equipment having vacuum or water spray mechanisms to eliminate the dispersion of particulate matter into the atmosphere. If vacuum equipment is employed, it must have a suitable self-contained particulate collector to prevent discharge from the collection bin into the atmosphere.

13. Public Convenience and Safety.

Revise standard spec 107.8(6) as follows:

Check for and comply with local ordinances governing the hours of operation of construction equipment. Do not operate motorized construction equipment from 7:00 PM until the following 7:00 AM, unless prior written approval is obtained from the engineer.

107-001 (20060512)

14. Notice to Contractor, Airport

The Dane County Regional Airport is located within five miles of the project. Mark the construction crane with a red light and airport flag conforming to FAA requirements AC150/5210-5 (current version). The flag must be at least a 3-foot by 3-foot square having a checkered pattern of international orange and white squares at least 1 foot on each side.

Notify Steve Sonntag at (608) 267-1997, of the City of Madison at least three business days prior to setting the crane. Lower the crane to the ground at night or when not in use.

In accordance to Code of Federal Regulations (CFR), title 14, Part 77.13, notify the Federal Aviation Administration (FAA) of construction plans and the maximum height of cranes. Notify the FAA no later than 45 days before cranes need to be in the air. For notification, use the FAA's Obstruction Evaluation/Airport Airspace Analysis (OE/AAA) website at: <http://oeaaa.faa.gov/oeaaa/external/portal.jsp>

15. Notice to Contractor, Removing Signs.

City of Madison forces will remove existing City of Madison signing and posts in coordination with construction under this contract. Provide notice to the City of Madison at least two weeks prior to construction. Coordination with the City of Madison signing and post removal will be with Phil Nehmer of Traffic engineering Field Operations, (608) 266-4767.

Several existing signs can remain in place through the duration of Stage 2 of the traffic control staging. Coordinate with the city to remove any remaining signs upon the completion of Stage 2. The signs to remain are shown on the plans.

16. Notice to Contractor, Permanent Signs.

City of Madison Traffic engineering will install all permanent signing and posts for the project. Provide the City of Madison with a schedule of operations at the preconstruction conference. Provide Phil Nehmer of Traffic engineering Field Operations, (608) 266-4767, a minimum two-week notice of the anticipated street opening date to begin placement of permanent signing and posts at least seven days prior to the streets being reopened to traffic.

Provide sign box outs in concrete medians in accordance to the standard detail drawing A4-3B as included in the plans. The sign box outs are incidental to the concrete sidewalk.

17. Notice to Contractor, Removing Street Lights and Signals.

City of Madison Traffic engineering will remove all existing City of Madison street lights and traffic signals in coordination with construction under this project. Provide notice to the City of Madison at least two weeks prior to construction. Coordination with the City of Madison street light and traffic signal removal will be with Michael Christoph of Traffic engineering Field Operations, (608) 266-9031.

18. Notice to Contractor, Street Lights and Signals.

City of Madison Traffic engineering will install all street lights and traffic signals for the project. Provide the City of Madison with a schedule of operations at the preconstruction conference. Provide Michael Christoph of Traffic engineering Field Operations, (608) 266-9031, a minimum three-week notice of the anticipated street opening date to begin installation of street lighting and traffic signals at least two weeks prior to the streets being reopened to traffic.

Concrete bases are to be plumb, of proper dimensions, and have proper anchor bolt exposure. The City of Madison will approve bases prior to light or signal installation. Any deficient bases will be rejected.

19. General Provisions for Madison Sanitary Sewer.

Utility Standard Specifications

Perform work in accordance to these provisions and the State of Wisconsin, Department of Transportation, Standard Specifications for Highway and Structure Construction and the City of Madison Standard Specifications for Public Works Construction-Latest Edition, hereinafter referred to as the City Standard Specifications. In the event of a conflict the Wisconsin Department of Transportation Standard Specifications will take precedence.

Work Sequence

Contact the identified person below 10 working days prior to starting work on the sanitary sewer and provide a schedule of operations. Construct sanitary sewer main and

laterals in stages in accordance to the traffic control plan and in proper coordination with construction for activities adjacent to the sanitary sewer main.

Provide bypass pumping of sanitary sewage to maintain sanitary sewer service when new sewer access structures are being constructed over the existing mains.

Shop Drawings and Samples

Submit shop drawings and samples to the engineer and City of Madison Engineering Department as required in these Special Provisions and for the following:

- Sanitary Sewer Pipe Material
- Sanitary Sewer Access Structure Casting and Manhole Covers Type MAD
- Sanitary Sewer Access Structure (4-Foot Diameter)
- Sewer Electronic Markers
- Select Fill for Sanitary Sewer

Contractor's responsibilities include:

- Review shop drawings and samples prior to submittal;
- Determine and verify field measurements, field construction criteria, catalog numbers and similar data, and conformance with specifications;
- Coordinate each submittal with requirements of work and of Special Provisions;
- Notify city engineer or city engineer's representative, in writing, at time of submittal of deviations in submittals from requirements of special provisions.

NOTE: Do not begin any fabrication or work listed above as requiring shop drawings or samples until return of submittals with city engineer's or city engineer representative's approval.

Provide shop drawings containing the following:

- A. Date of submittal and dates of previous submittals.
- B. Project title and number.
- C. Contract identification.
- D. Names of contractor, supplier, and manufacturer.
- E. Identification of product, with identification numbers, and drawing and specification section numbers.
- F. Field dimensions clearly identified.
- G. Identification of details required on drawings and in specifications.

- H. Manufacturer and model number (give dimensions and provide clearances).
- I. Relation to adjacent or critical features or work or materials.
- J. Applicable standards, such as ASTM, and identification of deviations from contract documents.
- K. Source of samples and material properties.
- L. Identification of revisions on re-submittals.
- M. Eight-inch and three-inch blank space for contractor and city engineer stamps.
- N. Contractor's stamp, signed, certifying to review of submittal, verification of products, field measurement, field construction criteria, and coordination of information with submittal with requirements of work and Special Provisions.

If required by the city engineer or city engineer's representative, resubmit shop drawings that include the following:

- A. Corrections or changes from previous submittals as indicated by city engineer or city engineer's representative. Re-submittals are required until approved.
- B. Shop Drawings and Product Data: Review initial drawings or data and resubmit as specified for initial submittal. Indicate changes, which have been made other than those requested by city engineer.

Testing and Acceptance: Submit materials production and field placement testing results as required by the City of Madison Standard Specifications for Public Works Construction-2014 Edition or as required by the city engineer or city engineer's representative. Final acceptance of sanitary sewer and related materials such as backfill, concrete, slurry, etc. will come from the city engineer or city engineer's representative.

Allow the City of Madison to sample/test materials as requested. Provide complete copies of required submittals as follows:

Shop Drawings:	6 copies
Sampling/Testing Results:	3 copies

Deliver required copies of submittals and testing results to Mark Moder, City of Madison, Department of Public Works, City-County Building, Room 115, 210 Martin Luther King Jr. Boulevard, Madison, Wisconsin 53710, mmoder@cityofmadison.com. Use of email in lieu of hard copy transmittal is an accepted transmittal method of materials for approval.

The city engineer or city engineer's representative will review and return shop drawings to the contractor within one week of date of receipt.

Protection of Sewers: Take adequate measures to prevent impairment of operation of existing sanitary sewer and storm sewer systems. Prevent construction material, concrete, earth, or other debris from entering sewer or sewer structure.

Divert sewage flow interfering with construction to sanitary sewers leading away from construction area. Prior to commencing excavation and construction of work impacting existing city sewer, submit to city engineer for review, detailed plans, including routing and connections, required to handle and dispose of sanitary wastes. By reviewing the plan, the city engineer neither accepts responsibility for adequacy thereof nor for damages to public or private property resulting there from, such responsibilities remain with the contractor.

Sanitary sewer damaged or removed during construction, which is to remain in service, will be restored or replaced to original material and workmanship used for original construction.

All City of Madison manhole castings removed from sewer access structures (removed, abandoned, or swapped out with a casting elevation adjustment) will be delivered to city Engineering's Service Building, 1600 Emil Street, Madison, WI 53713.

The costs to remove all abandoned utility pipes within the sanitary sewer pipe trench or sewer access structure excavation will be included in the unit price bid for the pipe of the type, class and diameter used. The cost includes installing a concrete plug in the portion of the abandon pipe that remains in place after completion of sanitary sewer trench.

In accordance to the City of Madison Standard Specifications for Public Works Construction – 2014 Edition, "Pipe to be removed that is in the same trench as a new pipe will not be compensated as remove pipe and will be considered to be incidental to the new pipe installation." Same trench will be considered to be any pipe located with 3' horizontally of the pipe being installed.

City of Madison (sanitary sewer) has underground facilities located within the project area. Relocation of the underground facilities will be accomplished as part of contract by the contractor. Existing facilities and anticipated proposed relocations are as follows:

- Milwaukee Street –Center of street (6" diameter VCP): Station 4+34.45 RT 0.94' to Station 8+33.86 LT 17.13'

Sanitary Sewer removals, replacements, and adjustments are included as part of the project as shown on the plans. Coordinate operations with the City of Madison. Contact Mark Moder, (608) 261-9250.

Waunona Sanitary District#2 (sanitary sewer) has underground facilities located within the project area.

Existing facilities are located as follows:

- Fair Oaks Ave. –Center of street (15” diameter RCP): Station 205+48.55 RT 13.65’ to Station 210+27.95 RT 6.78’

Sanitary Sewer adjustments are included as part of the project as shown on the plans. Coordinate operations with the Waunona Sanitary District#2. Contact Hal Bohne, (608) 249-0705 or waunona@sbcglobal.net.

Madison Metropolitan Sewerage District (MMSD) (sanitary sewer) has underground facilities located within the project area.

Existing facilities are located as follows:

- Fair Oaks Ave. –Northbound traffic lane (15” diameter RCP): Station 200+74 RT 18.24’ to Station 205+48.50 RT 13.65’

Sanitary Sewer casting adjustments are included as part of the project as shown on the plans. Coordinate operations with the MMSD. MMSD will supply a rubber adjustment ring and new casting. Contact Ray Schneider, (608)347-3628, three days prior to adjusting the manhole casting to grade.

20. General Provisions for City of Madison Water Main.

Contact Information:

Madison Water Utility
Adam Wiederhoeft, PE
Phone: (608) 266-9121
E-mail: awiederhoeft@madisonwater.org

Utility Standard Specifications: Perform work in accordance to these provisions and the State of Wisconsin, Department of Transportation, Standard Specifications for Highway and Structure Construction and the City of Madison Standard Specifications for Public Works Construction-Latest Edition, hereinafter referred to as the *City Standard Specifications*. In the event of a conflict the Wisconsin Department of Transportation Standard Specifications will take precedence.

Work Sequence: Contact the identified person above at least 10 working days prior to starting water main work and provide a schedule of operations.

Construct water main and water service laterals in stages in accordance to the traffic control plans and in proper coordination with construction activities adjacent to the water main. Note that water mains and service laterals crossing traffic control/phasing limits may require temporary flushing appurtenances and/or temporary fittings to accommodate the phased construction. Any such installation and/or removal of temporary flushing devices

or temporary fittings are considered to be incidental to the water main and service lateral construction.

As construction staging and sequence allows, disinfect the new water mains. Madison Water Utility will flush and test all newly installed water mains. Coordinate as necessary with Madison Water Utility for these operations. After the water main has passed bacteriological and pressure testing, install replacement water services and make connections to the existing water system. Water main installation will consist of strategic abandonment of the existing water main. Abandon existing water main only after the new water main has passed all required testing, new main has been properly brought online into the system and all service laterals, except any called to be abandoned, have been relocated to the new main.

Keep valves at connection points between the new water main and the existing water main closed until the new water main has passed all testing. Where new valves need to be opened to fill the new water main for testing and flushing, arrange sequencing so to preclude backflow of any water from the new water main to the existing water main.

Following the installation of replacement water services and the connection of replacement water main to the existing water main at locations noted on the plans, cut off and drain the existing main. Plug or bulk-head the open ends with concrete and abandon the existing main in place. This work is considered incidental to the new water main installation.

Temporary Flushing Hydrants: Determine the need for and location of temporary flushing hydrants based on the phasing and sequencing of water main installation. The furnishing, installation, use and abandonment of temporary flushing hydrants is incidental to water main installation. Do not permanently install any hydrant used as a temporary flushing hydrant more than one time.

Temporary Air Bleed: Where any installation of proposed watermain does not have an adjacent hydrant or other means of bleeding air from the main, install a temporary 2-inch corporation stop at the high point of the main. Remove the stop and plug the opening after successful completion of water main testing. Installation, use, maintenance, removal and plugging of corporation stops for use as air bleeding devices are considered incidental to the installation of water main.

Service Laterals Across Traffic Phase Limits: For any water service lateral connections, extensions or replacements that extend across traffic phasing limits, stub the laterals at the limits with a curb stop with the valve in the off position and at the elevation required to clear any underground utilities. Make the final service connection from the curb stop, leaving the curb stop underground without a box with the valve in the open position. When making the final connection, ensure the previously installed copper is still securely connected to the curb stop and that the lateral has not been compromised during construction. Repair any damaged laterals or leaking connections at no additional cost to the department or the city. The furnishing and installation of the curb stops and couplings are considered to be incidental to the respective service bid items.

Location of Existing Water Service Laterals: The horizontal location and size of all water laterals indicated on the plans is taken from surveys, approximate measurements, and the city's available records. These records are not guaranteed to be accurate in all cases and do not indicate at what depths these laterals are located. As such, determine the location and size of the existing laterals before making a tap into the new water main. Follow the plans to determine which services are to be abandoned, reconnected, extended, or replaced to the property line.

Location of Existing Water Facilities: The horizontal and vertical location and size of all existing water mains indicated on the plans is taken partially from surveys, approximate measurements, and the city's available records. These records are not guaranteed to be accurate in all cases. Due to the unverified depth and location of existing pipelines, alteration of the lines and grades shown on the plans for new pipelines where connections are to be made to existing pipelines may be necessary. Notify the engineer of locations where alterations of the lines and grades shown are necessary so that an acceptable solution can be determined.

21. General Requirements for Electrical Work.

Replace standard spec 651.2(6) with the following:

The approved products list is located at:

<http://www.dot.wisconsin.gov/business/engrserv/docs/ap0/electrical.pdf>

22. General Provisions for City Traffic Signals and Street Lights.

Perform all work on the lighting and conduit/pull box system in accordance to the Wisconsin Electrical Code, the applicable provisions of the standard specifications, and these special provisions and plans.

The City of Madison and others will install temporary street lights during construction. The contractor shall protect all the temporary lighting structures during construction. Any damage to the temporary lighting systems without the specific approval by the city traffic engineering electrical inspector shall be promptly repaired or replaced by and at the expense of the contractor. The city may elect to do repair work with city crews or others. The cost for any repair work done by the city will be billed to the contractor.

The City of Madison will remove existing traffic signals and street light poles when it is needed by the construction and after the temporary traffic control and street lights are in place. Contact Michael Christoph at the City of Madison Traffic Engineering Shop, (608-266-9031), to coordinate removal of existing signals and street lights.

Before the City of Madison removes the existing traffic signals and street lights, all the signal and lighting poles, conduits, handholes, and manholes shall be protected for as long as possible during construction. If the contractor believes that damage to such facilities is unavoidable, the contractor shall not damage or remove any facilities until the city traffic

engineering electrical inspector has reviewed and approved such actions. Any damage or removal of city electrical conduit, wire, or structures, without the specific approval by the city traffic engineering electrical inspector shall be promptly repaired or replaced by and at the expense of the contractor. The city may elect to do repair work with city crews. The cost for any repair work done by the city will be billed to the contractor.

The City of Madison will need ten working days to reinstall permanent traffic signals and street lights, after the contractor fully completes all electrical conduits and structures, and after all concrete bases cure for a minimum of seven days. Contact Michael Christoph at the City of Madison Traffic Engineering Shop, (608) 266-9031, to coordinate installation of new signals and street lights. The roadway can be fully opened only after the City of Madison confirms that the new traffic signals are fully operational.

Maintain a minimum of 6 feet separation between any adjacent loop detectors.

Pick up the following materials which are to be furnished by the City of Madison at the Traffic Engineering Shop, 1120 Sayle Street, unless otherwise specified. Contact Dennis Rowe at (608) 266-9034 at least 24 hours in advance for pick-up. All costs of the work included in this Section shall be at the expense of the contractor unless otherwise provided. Provide equipment and labor to load materials onto contractor's vehicle or trailer.

ITEM	QUANTITY
Concrete Base Type 10 anchor bolts, hardware, and bottom templates	3 Sets with 18 bolts
Concrete Base Type 10 top templates	3

After concrete sets, the top templates for the type 10 bases shall be removed and returned to City of Madison Traffic Engineering Shop, 1120 Sayle Street. Contact Dennis Rowe at (608) 266-9034 at least 24 hours in advance for the return. If the Contractor fails to return the top templates, a \$500 penalty will be assessed by the City of Madison for each missing template.

23. General Provisions for City Conduit Installation.

Supplement standard spec 652 as follows:

Use Schedule 80 conduit under all traffic areas.

Install all conduit at a minimum depth of 30 inches, unless otherwise approved by the engineer. Solvent weld all joints. Mark the location of each conduit, where conduit crosses traffic areas, by a permanent chiseled arrow or other appropriate permanent stamp in top of the curb head.

Install and connect all conduit to the concrete bases, manholes, handholes, existing conduit, or conduit elbows so as to provide a continuous network, unless otherwise indicated on the plan. All connections shall be watertight. Do not install drainage holes in conduit. Uncover the ends or mid-sections of all existing conduit that is being extended by or incorporated into this project work.

When connections are to be made to an existing conduit, first verify that the existing conduit is fully clear and useable for its entire cross-section and length. When the existing conduit is found to be defective, notify the engineer and do not proceed until the engineer so directs. If the contractor connects to an existing defective conduit without the express direction from the engineer, make any and all necessary repairs and replacements to all conduits, including conduit that was “existing” prior to the contractor starting work and to the satisfaction of the engineer. All costs of this work shall be at the expense of the contractor.

Turn up conduits terminating in a non-paved location and not in a structure, and end at terrace finish grade with a PVC cap securely attached, per duct termination detail. Where conduit runs parallel to curb and gutter, place the conduit within 12 inches of the back of the curb, except as directed by the engineer. The engineer will determine termination points not within pull boxes or concrete bases.

Unless the contract provides for installation of cable, cap the ends of each run of conduit with standard conduit caps or otherwise appropriately plug the ends to preclude infiltration of water and soil. Install a pull wire in each conduit. A pull wire shall be approximately 4 feet longer than the conduit run, and shall be doubled back for at least 2 feet at each terminal. The pull wire shall be #10 AWG copper, stranded, with THHN insulation and green color coding. Install the pull wire within seven days of completing a conduit installation from structure-to-structure.

Use a 6-inch minimum sand padding below the conduit and a 6-inch minimum sand lift above the conduit. Do not backfill trench with any rocks larger than 4 inches in diameter or any foreign debris.

24. General Provisions for City Electrical Systems.

A General Requirements

Perform this work in accordance to the Wisconsin Electrical Code, National Electrical Contractor's Association (NECA) electrical construction practices, OSHA and the standard specifications.

Perform all work on the lighting and conduit/pull box system in accordance to the Wisconsin Electrical Code, and applicable provisions of standard spec 659, and these special provisions and plans.

Carefully remove and salvage the steel frames and covers from all pull boxes and manholes to be removed or abandoned, and all street light poles, arms, transformer bases, fixtures, concrete handholes, and associated equipment. Return material designated by the city to be saved to city Traffic Engineering, 1120 Sayle Street, Madison.

Complete electrical work by a journey-worker electrician or be completed by an electrical apprentice under the supervision of a journey-worker electrician. Legal status or standing as a journey-worker and apprentice electricians shall be certified or otherwise documented

to the engineer before beginning any electrical work. Electrical work is hereby defined as electrical and related construction required to be performed under the contract by the contractor, in accordance to the standard specifications, contract provisions, standard detail drawings and plan details applicable to electrical construction.

At the pre-construction conference, supply the engineer with a list of names and qualifications of journey-workers and/or electrical apprentices who will or may be working on this contract.

Proof of qualification to do electrical journey-worker level work shall be the "Completion of Apprenticeship" certification card issued by an approved state agency, or a resume showing sufficient electrical education and a minimum of 14,000 hours of varied electrical work experience. All apprentices shall be indentured by an approved state agency.

The contractor is hereby advised that electrical apprentices must work under the terms of their indentures, which require an apprentice be under the direct supervision of a journeyworker with the exception of an apprentice in the final year as an apprentice. Any violation, or suspected violation, of these terms will be reported to the Bureau of Apprenticeship Standards.

It must be understood that electrical drawings and details are diagrammatic; they are not intended to be shop drawings. It is expected it may be necessary to move conduit, and/or equipment in some cases, to get a coordinated installation. Such changes are considered part of the contract obligation, without cost to the owner. Do not locate any equipment where its usefulness and/or operation may be affected by the work of other trades, door swing, counter, equipment, etc.

The contractor acknowledges his acquaintance with the plans and specifications and their respective requirements, and shall guarantee the electrical system has been installed strictly in accordance to the electrical plans and specifications, using only the best of materials available and installed in a substantial manner by experienced labor. The contractor agrees to replace and/or repair items failing from causes of faulty workmanship, material or design, without extra cost, at any time within one year from the date of final acceptance.

Furnish the City of Madison with service manuals for all items furnished under this contract. Service manuals shall be complete with drawings, diagrams, operation and installation instructions, and parts lists.

Submit one copy of as-built plans, including cable and conduit routing diagrams, wiring of fixtures and other pertinent details, to the engineer and the City of Madison.

B Underground Installation

Ensure that the engineer has inspected all underground conduit and concrete base forms before backfilling any trench or pouring concrete. Any work completed without such inspection is subject to rejection as unacceptable work and shall be immediately removed

and acceptably replaced or otherwise satisfactorily corrected by and at the expense of the contractor. It is the contractor's responsibility to arrange for inspections. There will not be any additional compensation to the contractor for delays and inconvenience associated with arranging and waiting for inspections.

25. Removing Old Structure Over Waterway With Minimal Debris Station 10+00, Item 203.0600.S.01.

Conform to standard spec 203 as modified in this special provision.

Add the following to standard spec 203:

203.3.6 Removals Over Waterways and Wetlands

203.3.6.2 Removing Old Structure Over Waterway with Minimal Debris

- (1) Remove the existing Structure B-13-0033 over the East Branch Starkweather Creek in large sections and conforming to the contractor's approved structure removal and clean-up plan. During superstructure removal, prevent all large pieces and minimize the number of small pieces from entering the waterway or wetland. Remove all reinforcing steel, all concrete, and all other debris that falls into the waterway or wetland. The contractor may leave limited amounts of small concrete pieces scattered over the waterway floor or wetland only if the engineer allows.
- (2) Submit a structure removal and clean-up plan as part of the erosion control implementation plan required under standard spec 107.20. Do not start work under the structure removal and clean-up plan without the department's written approval of the plan. Include the following information in the structure removal and clean-up plan:
 - Methods and schedule to remove the structure.
 - Methods to control potentially harmful environmental impacts.
 - Methods for superstructure removal that prevent all large pieces and minimize the number of small pieces from entering the waterway or wetlands.
 - Methods to control dust and contain slurry.
 - Methods for removing piers and abutments. If blasting in water, include restrictions that regulatory agencies and the contract require.
 - Methods for cleaning the waterway or wetlands.
- (3) If stockpiling spoil material, place it on an upland site an adequate distance from the waterway, wetland, or any open water created by excavation. Install silt fence between the spoil pile and the waterway, wetland, or excavation site.

Add the following Removing Old Structure bid item to standard spec 203.5.1:

ITEM NUMBER	DESCRIPTION	UNIT
203.0600.S.01	Removing Old Structure Over Waterway With Minimal Debris Station 10+00	LS
203-020 (20080902)		

26. Abandoning Sewer, Item 204.0291.S.

A Description

This special provision describes abandoning existing sewer by filling it with cellular concrete according to the pertinent requirements of standard spec 204 and standard spec 501, as shown in the plans, and as hereinafter provided.

B Materials

Provide cellular concrete meeting the following specifications: 1 part cement, 1 part fly ash, 8 parts sand, or an approved equal, and water. Provide cement meeting the requirements of standard spec 501.2.1 for Type 1 Portland Cement. Provide sand meeting the requirements of standard spec 501.2.5.3 Provide water meeting the requirements of standard spec 501.2.4.

C Construction

Fill the abandoned sewer pipe with cellular concrete as directed by the engineer. In the event that the sewer cannot be completely filled from existing manholes, tap the sewer where necessary and fill from these locations.

D Measurement

The department will measure Abandoning Sewer in volume by the cubic yard according to standard spec 109.1.3.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
204.0291.S	Abandoning Sewer	CY

Payment is full compensation for furnishing all materials and excavating and backfilling where necessary.

204-050 (20080902)

27. Excavation, Hauling, and Disposal of Petroleum Contaminated Soil, Item 205.0501.S.

A Description

A.1 General

This special provision describes excavating, loading, hauling, and disposing of petroleum contaminated soil at a DNR approved bioremediation facility. The closest DNR-approved landfills which include bioremediation facilities are listed below, another WDNR-approved facility may be proposed:

Waste Management Madison Prairie Landfill
3490 Nelson Road
Sun Prairie, WI 53590
(608) 837-9031
Contact: Tim Nelson (608) 535-3011

Waste Management Deer Track Park Landfill
N6756 Waldmann Lane
Farmington, WI 53094
(608) 837-9031
Contact: Tim Nelson, (608) 535-3011

Perform this work in accordance to standard spec 205 and with pertinent parts of Chapters NR 700-754 of the Wisconsin Administrative Code, as supplemented herein. Per NR 718.07, a solid waste collection and transportation service-operating license is required under NR 502.06 for each vehicle used to transport contaminated soil.

A.2 Notice to the Contractor – Contaminated Soil Location(s)

The City of Madison completed testing for soil and groundwater contamination for locations within this project where excavation is required. Testing indicated that petroleum-contaminated soil is present at the following location(s) as shown on the plans:

- South 60 feet – 122 feet (potential petroleum contamination) along the western stream bank of the Starkweather Creek along Milwaukee Street (Station 9+70 – 9+90) at a depth 10 feet below ground surface. The location as indicated in the plans.

If contaminated soils are encountered elsewhere on the project, terminate excavation activities in the area and notify the engineer.

For further information regarding previous investigation and remediation activities at these sites contact:

Name: Scott LaCoursiere, OTIE, LLC
Address: 5100 East Park Boulevard, Suite 200, Madison, WI 53718
Phone: (608)-243-6471
Fax: (608)-241-3914
E-mail: slacoursiere@otie.com

A.3 Coordination

Coordinate work under this contract with the City of Madison environment consultant:

Consultant: City of Madison
Address: 210 Martin Luther King, Jr. Blvd, Rm 115
Contact: Brynn Bemis
Phone: (608)-267-1986
Fax: (608)-264-9275
E-mail: bbemis@cityofmadison.com

The role of the environmental consultant will be limited to:

1. If the environmental consultant cannot be present, it will be assumed that everything as indicated within the previously stated limits (South 60 feet – 122 feet along the western stream bank of the Starkweather Creek along Milwaukee Street (Station 9+70 – 9+90) 10-ft below ground surface is contaminated as shown on the plans, unless otherwise directed by the engineer.
2. Identifying contaminated soils to be hauled to the bioremediation facility;
3. Documenting that activities associated with management of contaminated soil are in conformance with the contaminated soil management methods for this project as specified herein; and
4. The city will handle profiling the material for landfill disposal and will provide the contractor with manifests for hauling. Profiling for the two Waste Management facilities listed has been completed.

Provide at least a 14-calendar day notice of the preconstruction conference date to the environmental consultant. At the preconstruction conference, provide a schedule for all excavation activities in the areas of contamination to the environmental consultant. Also notify the environmental consultant at least three calendar days prior to commencement of excavation activities in each of the contaminated areas.

Perform excavation work in each of the contaminated areas on a continuous basis until excavation work is completed.

Identify the DNR approved bioremediation facility that will be used for disposal of contaminated soils, and provide this information to the environmental consultant no later than 30 calendar days prior to commencement of excavation activities in the contaminated areas or at the preconstruction conference, whichever comes first. The environmental consultant will be responsible for obtaining the necessary approvals for disposal of contaminated soils from the bioremediation facility. Do not transport contaminated soil offsite without prior approval from the environmental consultant.

A.4 Health and Safety Requirements

Supplement standard spec 107.1 with the following:

During excavation activities, expect to encounter soil contaminated with gasoline, diesel fuel, fuel oil, or other petroleum related products. Site workers taking part in activities that will result in the reasonable probability of exposure to safety and health hazards associated

with hazardous materials shall have completed health and safety training that meets the Occupational Safety and Health Administration (OSHA) requirements for Hazardous Waste Operations and Emergency Response (HAZWOPER), as provided in 29 CFR 1910.120.

Prepare a site-specific Health and Safety Plan, and develop, delineate and enforce the health and safety exclusion zones for each contaminated site location as required by 29 CFR 1910.120. Submit the site-specific health and safety plan and written documentation of up-to-date OSHA training to the engineer prior to the start of work.

B (Vacant)

C Construction

Supplement standard spec 205.3 with the following:

Control operations in the contaminated areas to minimize the quantity of contaminated soil excavated.

Directly load and haul contaminated soils as designated on the plans to the DNR approved bioremediation facility. Use loading and hauling practices that are appropriate to prevent any spills or releases of petroleum-contaminated soils or residues. Prior to transport, sufficiently dewater soils designated for off-site bioremediation so as not to contain free liquids.

D Measurement

The department will measure Excavation, Hauling, and Disposal of Petroleum Contaminated Soil in tons of contaminated soil accepted by the bioremediation facility as documented by weight tickets generated by the bioremediation facility.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
205.0501.S	Excavation, Hauling, and Disposal of Petroleum Contaminated Soil	Ton

Payment is full compensation for excavating, segregating, loading, hauling, and treatment via bioremediation of contaminated soil, including all associated taxes and fees; obtaining solid waste collection and transportation service operating licenses; assisting in the collection soil samples for field evaluation; and dewatering of soils prior to transport, if necessary.

The City of Madison will pay for any volume charges or disposal fees required by the City of Madison Sanitary Sewer Utility or Madison Metropolitan Sewerage District for the discharge of water into the sanitary sewer system.

28. QMP Base Aggregate.

A Description

A.1 General

- (1) This special provision describes contractor quality control (QC) sampling and testing for base aggregates, documenting those test results, and documenting related production and placement process changes. This special provision also describes department quality verification (QV), independent assurance (IA), and dispute resolution.
- (2) Conform to standard spec 301, standard spec 305, and standard spec 310 as modified here in this special provision. Apply this special provision to material placed under all of the Base Aggregate Dense and Base Aggregate Open Graded bid items, except do not apply this special provision to material classified as reclaimed asphaltic pavement placed under the Base Aggregate Dense bid items.
- (3) Do not apply this special provision to material placed under the Aggregate Detours, Salvaged Asphaltic Pavement Base, Breaker Run, Select Crushed, Pit Run, Subbase, or Riprap bid items.
- (4) Provide and maintain a quality control program, defined as all activities related to and documentation of the following:
 1. Production and placement control and inspection.
 2. Material sampling and testing.
- (5) Chapter 8 of the department's construction and materials manual (CMM) provides additional detailed guidance for QMP work and describes required sampling and testing procedures. The contractor may obtain the CMM from the department's web site at:

<http://roadwaystandards.dot.wi.gov/standards/cmm/index.htm>

A.2 Contractor Testing for Small Quantities

- (1) The department defines a small quantity, for each individual Base Aggregate bid item, as a plan quantity of 9000 tons or less of material as shown in the schedule of items under that bid item.
- (2) The requirements under this special provision apply equally to a small quantity for an individual bid item except as follows:
 1. The contractor need not submit a full quality control plan but shall provide an organizational chart to the engineer including names, telephone numbers, and current certifications of all persons involved in the quality control program for material under affected bid items.

2. Divide the aggregate into uniformly sized sublots for testing as follows:

Plan Quantity	Minimum Required Testing
≤ 1500 tons	One test from production, load-out, or placement at the contractor's option ^[1]
> 1500 tons and ≤ 6000 tons	Two tests of the same type, either from production, load-out, or placement at the contractor's option ^[1]
> 6000 tons and ≤ 9000 tons	Three placement tests ^{[2] [3]}

^[1] If using production tests for acceptance, submit test results to the engineer for review prior to incorporating the material into the work. Production test results are valid for a period of 3 years.

^[2] For 3-inch material, obtain samples at load-out.

^[3] If the actual quantity overruns 9000 tons, create overrun sublots to test at a rate of one additional placement test for each 3000 tons, or fraction of 3000 tons, of overrun.

3. No control charts are required. Submit aggregate load-out and placement test results to the engineer within one business day of obtaining the sample. Assure that all properties are within the limits specified for each test.

4. Department verification testing is optional for quantities of 6000 tons or less.

- (3) Material represented by a subplot with any property outside the specification limits is nonconforming. The department may reject material or otherwise determine the final disposition of nonconforming material as specified in standard spec 106.5.

B Materials

B.1 Quality Control Plan

- (1) Submit a comprehensive written quality control plan to the engineer at or before the pre-construction meeting. Do not place base before the engineer reviews and comments on the plan. Construct the project as that plan provides.
- (2) Do not change the quality control plan without the engineer's review. Update the plan with changes as they become effective. Provide a current copy of the plan to the engineer and post in each of the contractor's laboratories as changes are adopted. Ensure that the plan provides the following elements:
 1. An organizational chart with names, telephone numbers, current certifications and/or titles, and roles and responsibilities of QC personnel.
 2. The process used to disseminate QC information and corrective action efforts to the appropriate persons. Include a list of recipients, the communication means that will be used, and action time frames.
 3. A list of source and processing locations, section and quarter descriptions, for all aggregate materials requiring QC testing.
 4. Test results for wear, sodium sulfate soundness, freeze/thaw soundness, and plasticity index of all aggregates requiring QC testing. Obtain this information from the region materials unit or from the engineer.
 5. Descriptions of stockpiling and hauling methods.

6. Locations of the QC laboratory, retained sample storage, and where control charts and other documentation is posted.
7. An outline for resolving a process control problem. Include responsible personnel, required documentation, and appropriate communication steps.

B.2 Personnel

- (1) Have personnel certified under the department's highway technician certification program (HTCP) perform sampling, testing, and documentation as follows:

Required Certification Level:	Sampling or Testing Roles:
Aggregate Technician IPP Aggregate Sampling Technician Aggregate Assistant Certified Technician (ACT-AGG)	Aggregate Sampling ^[1]
Aggregate Technician IPP Aggregate Assistant Certified Technician (ACT-AGG)	Aggregate Gradation Testing, Aggregate Fractured Particle Testing, Aggregate Liquid Limit and Plasticity Index Testing

^[1] Plant personnel under the direct observation of an aggregate technician certified at level one or higher may operate equipment to obtain samples.

- (2) A certified technician must coordinate and take responsibility for the work an ACT performs. Have a certified technician ensure that all sampling and testing is performed correctly, analyze test results, and post resulting data. No more than one ACT can work under a single certified technician.

B.3 Laboratory

- (1) Perform QC testing at a department-qualified laboratory. Obtain information on the Wisconsin laboratory qualification program from:
Materials Management Section
3502 Kinsman Blvd.
Madison, WI 53704
Telephone: 608-246-5388
<http://www.dot.state.wi.us/business/engrserv/lab-qualification.htm>

B.4 Quality Control Documentation

B.4.1 General

- (1) Submit base aggregate placement documentation to the engineer within 10 business days after completing base placement. Ensure that the submittal is complete, neatly organized, and includes applicable project records and control charts.

B.4.2 Records

- (1) Document all placement observations, inspection records, and control adjustments daily in a permanent field record. Also include all test results in the project records. Provide test results to the engineer within 6 hours after obtaining a sample. For 3-inch

base, extend this 6-hour limit to 24 hours. Post or distribute tabulated results using a method mutually agreeable to the engineer and contractor.

B.4.3 Control Charts

- (1) Plot gradation and fracture on the appropriate control chart as soon as test results are available. Format control charts according to CMM 8.30. Include the project number on base placement control charts. Maintain separate control charts for each base aggregate size, source or classification, and type.
- (2) Provide control charts to the engineer within 6 hours after obtaining a sample. For 3-inch base, extend this 6-hour limit to 24 hours. Post or distribute charts using a method mutually agreeable to the engineer and contractor. Update control charts daily to include the following:
 1. Contractor individual QC tests.
 2. Department QV tests.
 3. Department IA tests.
 4. Four-point running average of the QC tests.
- (3) Except as specified under B.8.2.1 for nonconforming QV tests, include only QC tests in the running average. The contractor may plot process control or informational tests on control charts, but do not include these tests, conforming QV tests, or IA tests in the running average.

B.5 Contractor Testing

- (1) Test gradation, fracture, liquid limit and plasticity index during placement for each base aggregate size, source or classification, and type.
- (2) Test gradation once per 3000 tons of material placed. Determine random sample locations and provide those sample locations to the engineer. Obtain samples after the material has been bladed, mixed, and shaped but before compacting; except collect 3-inch samples from the stockpile at load-out. Do not sample from material used to maintain local traffic or from areas of temporary base that will not have an overlying pavement. On days when placing only material used to maintain local traffic or only temporary base that will not have an overlying pavement, no placement testing is required.
- (3) Split each contractor QC sample and identify it according to CMM 8.30. Retain the split for 7 calendar days in a dry, protected location. If requested for department comparison testing, deliver the split to the engineer within one business day.
- (4) The engineer may require additional sampling and testing to evaluate suspect material or the technician's sampling and testing procedures.
- (5) Test fracture for each gradation test until the fracture running average is above the lower warning limit. Subsequently, the contractor may reduce the frequency to one test per 10 gradation tests if the fracture running average remains above the warning limit.

- (6) Test the liquid limit and plasticity index for the first gradation test. Subsequently, test the liquid limit and plasticity index a minimum of once per 10 gradation tests.

B.6 Test Methods

B.6.1 Gradation

- (1) Test gradation using a washed analysis conforming to the following as modified in CMM 8.60:
Gradation..... AASHTO T 27
Material finer than the No. 200 sieve..... AASHTO T 11
- (2) For 3-inch base, if 3 consecutive running average points for the percent passing the No. 200 sieve are 8.5 percent or less, the contractor may use an unwashed analysis. Wash at least one sample out of 10. If a single running average for the percent passing the No. 200 sieve exceeds 8.5 percent, resume washed analyses until 3 consecutive running average points are again 8.5 percent passing or less.
- (3) Maintain a separate control chart for each sieve size specified in standard spec 305 or standard spec 310 for each base aggregate size, source or classification, and type. Set control and warning limits based on the standard specification gradation limits as follows:
 1. Control limits are at the upper and lower specification limits.
 2. There are no upper warning limits for sieves allowing 100 percent passing and no lower control limits for sieves allowing 0 percent passing.
 3. Dense graded warning limits, except for the No. 200 sieve, are 2 percent within the upper and lower control limits. Warning limits for the No. 200 sieve are set 0.5 percent within the upper and lower control limits.
 4. Open graded warning limits for the 1-inch, 3/8-inch, and No. 4 sieves are 2 percent within the upper and lower control limits. Upper warning limits for the No. 10, No. 40, and No. 200 sieves are 1 percent inside the upper control limit.

B.6.2 Fracture

- (1) Test fracture conforming to CMM 8.60. The engineer will waive fractured particle testing on quarried stone.
- (2) Maintain a separate fracture control chart for each base aggregate size, source or classification, and type. Set the lower control limit at the contract specification limit, either specified in another special provision or in table 301-2 of standard spec 301.2.4.5. Set the lower warning limit 2 percent above the lower control limit. There are no upper limits.

B.6.3 Liquid Limit and Plasticity

- (1) Test the liquid limit and plasticity according to AASHTO T 89 and T 90.
- (2) Ensure the material conforms to the limits specified in standard spec table 301-2.

B.7 Corrective Action

B.7.1 General

- (1) Consider corrective action when the running average trends toward a warning limit. Take corrective action if an individual test exceeds the contract specification limit. Document all corrective actions both in the project records and on the appropriate control chart.

B.7.2 Placement Corrective Action

- (1) Do not blend additional material on the roadbed to correct gradation problems.
- (2) Notify the engineer whenever the running average exceeds a warning limit. When 2 consecutive running averages exceed a warning limit, the engineer and contractor will discuss appropriate corrective action. Perform the engineer's recommended corrective action and increase the testing frequency as follows:
 1. For gradation, increase the QC testing frequency to at least one randomly sampled test per 1000 tons placed.
 2. For fracture, increase the QC testing frequency to at least one test per gradation test.
- (3) If corrective action improves the property in question such that the running average after 4 additional tests is within the warning limits, the contractor may return to the testing frequency specified in B.5.3. If corrective action does not improve the property in question such that the running average after 4 additional individual tests is still in the warning band, repeat the steps outlined above starting with engineer notification.
- (4) If the running average exceeds a control limit, material starting from the first running average exceeding the control limit and ending at the first subsequent running average inside the control limit is nonconforming and subject to pay reduction.
- (5) For individual test results significantly outside the control limits, notify the engineer, stop placing base, and suspend other activities that may affect the area in question. The engineer and contractor will jointly review data, data reduction, and data analysis; evaluate sampling and testing procedures; and perform additional testing as required to determine the extent of potentially unacceptable material. The engineer may direct the contractor to remove and replace that material. Individual test results are significantly outside the control limits if meeting one or more of the following criteria:
 1. A gradation control limit for the No. 200 sieve is exceeded by more than 3.0 percent.
 2. A gradation control limit for any sieve, except the No. 200, is exceeded by more than 5.0 percent.
 3. The fracture control limit is exceeded by more than 10.0 percent.

B.8 Department Testing

B.8.1 General

- (1) The department will conduct verification testing to validate the quality of the product and independent assurance testing to evaluate the sampling and testing. The

department will provide the contractor with a listing of names and telephone numbers of all QV and IA personnel for the project, and provide test results to the contractor within 2 business days after the department obtains the sample.

B.8.2 Verification Testing

B.8.2.1 General

- (1) The department will have an HTCP technician, or ACT working under a certified technician, perform QV sampling and testing. Department verification testing personnel must meet the same certification level requirements specified in B.2 for contractor testing personnel for each test result being verified. The department will notify the contractor before sampling so the contractor can observe QV sampling.
- (2) The department will conduct QV tests of each base aggregate size, source or classification, and type during placement conforming to the following:
 1. One non-random test on the first day of placement.
 2. At least one random test per 30,000 tons, or fraction of 30,000 tons, placed.
- (3) The department will sample randomly, at locations independent of the contractor's QC work, collecting one sample at each QV location. The department will collect QV samples after the material has been bladed, mixed, and shaped but before compacting; except, for 3-inch aggregates, the department will collect samples from the stockpile at load-out. The department will split each sample, test half for QV, and retain half.
- (4) The department will conduct QV tests in a separate laboratory and with separate equipment from the contractor's QC tests. The department will use the same methods specified for QC testing.
- (5) The department will assess QV results by comparing to the appropriate specification limits. If QV test results conform to the specification, the department will take no further action. If QV test results are nonconforming, add the QV to the QC test results as if it were an additional QC test.

B.8.3 Independent Assurance

- (1) Independence assurance is unbiased testing the department performs to evaluate the department's QV and the contractor's QC sampling and testing including personnel qualifications, procedures, and equipment. The department will perform an IA review according to the department's independent assurance program. That review may include one or more of the following:
 1. Split sample testing.
 2. Proficiency sample testing.
 3. Witnessing sampling and testing.
 4. Test equipment calibration checks.
 5. Reviewing required worksheets and control charts.
 6. Requesting that testing personnel perform additional sampling and testing.

- (2) If the department identifies a deficiency, and after further investigation confirms it, correct that deficiency. If the contractor does not correct or fails to cooperate in resolving identified deficiencies, the engineer may suspend placement until action is taken. Resolve disputes as specified in B.9.

B.9 Dispute Resolution

- (1) The engineer and contractor should make every effort to avoid conflict. If a dispute between some aspect of the contractor's and the engineer's testing program does occur, seek a solution mutually agreeable to the project personnel. The department and contractor may review the data, examine data reduction and analysis methods, evaluate sampling and testing procedures, and perform additional testing. Use ASTM E 178 to evaluate potential statistically outlying data.
- (2) Production test results, and results from other process control testing, may be considered when resolving a dispute.
- (3) If the project personnel cannot resolve a dispute, and the dispute affects payment or could result in incorporating non-conforming product, the department will use third party testing to resolve the dispute. The department's central office laboratory, or a mutually agreed on independent testing laboratory, will provide this testing. The engineer and contractor will abide by the results of the third party tests. The party in error will pay service charges incurred for testing by an independent laboratory. The department may use third party test results to evaluate the quality of questionable materials and determine the appropriate payment. The department may reject material or otherwise determine the final disposition of nonconforming material as specified in standard spec 106.5.

C (Vacant)

D (Vacant)

E Payment

- (1) Costs for all sampling, testing, and documentation required under this special provision are incidental to this work. If the contractor fails to perform the work required under this special provision, the department may reduce the contractor's pay. The department will administer pay reduction under the non-performance of QMP administrative item.
- (2) For material represented by a running average exceeding a control limit, the department will reduce pay by 10 percent of the contract price for the affected Base Aggregate bid items listed in subsection A. The department will administer pay reduction under the Nonconforming QMP Base Aggregate Gradation or Nonconforming QMP Base Aggregate Fracture Administrative items. The department will determine the quantity of nonconforming material as specified in B.7.2.

301-010 (20100709)

29. Concrete Staining Multi-Color B-13-0677, Item 517.1015.S.01.

A Description

Furnish and apply a multi-color concrete stain to the exposed concrete surfaces of the structure, as detailed in the plans and as hereinafter provided.

B Materials

B.1 Mortar

Use mortar for sack rubbing the concrete surfaces as given in standard spec 502.3.7.5 or use one of the following products:

Preblended, Packaged Type II Cement: Tri-Mix by TK Products
 Thoroseal Pearl Gray by Thoro Products

The mortar shall contain one of the following acrylic bonding admixtures mixed and applied in accordance to manufacturer's recommendations:

Acrylic Bonding Admixture: TK-225 by TK Products
 Achro 60 by Thoro Products
 Achro Set by Master Builders

B.2 Concrete Stain

Use concrete stain manufactured for use on exterior concrete surfaces. Use the following products, or equal as approved by the department:

Tri-Sheen Concrete Surfacers, Smooth by TK Products
Tri-Sheen Acrylic by TK Products
TK-1450 Natural Look Urethane Anti-Graffiti Primers by TK Products
Safe-Cure and Seal EPX by Chem Masters
H&C Concrete Stain Solid Color Water Based by Sherwin-Williams

Provide a stain color to replicate weathered limestone similar to the stain on adjacent Structure B-13-0577, Milwaukee Street Bridge over West Branch Starkweather Creek.

Obtain approval of the staining test sample panels from the City of Madison and the engineer prior to the start of forming concrete masonry on the bridge. Contact Steve Sonntag, P.E., (608) 267-1997, for City of Madison approval.

C Construction

C.1 General

Furnish, prepare, apply, cure, and store all materials in accordance to the product manufacturer's specifications for the type and condition of application required.

Match or exceed the stain manufacturer's minimum recommended curing time of the concrete or 28 days, whichever is greater, prior to staining.

C.2 Preparation of Concrete Surfaces

Provide a sack rubbed finish in accordance to standard spec 502.3.7.5, using mortar as indicated above on concrete surfaces with open voids or honeycombing.

Following the sack rubbing, clean all concrete surfaces that are to be coated to ensure that the surface is free of all laitance, dirt, dust, grease, efflorescence, and any foreign material and that the surface will accept the coating material according to product requirements. As a minimum, clean the surface using a 3000-psi water blast. Hold the nozzle of the water blaster approximately 6 inches from the concrete surface and move it continuously in a sweeping motion. Give special attention to smooth concrete surfaces to produce an acceptable surface texture. Correct any surface problems resulting from the surface preparation methods. Grit blasting of the concrete surface is not allowed.

C.3 Staining Concrete Surfaces

Apply the concrete stain in accordance to the manufacturer's recommendations.

Apply the concrete stain when the temperature of the concrete surface is 45° F or higher, or as given by the manufacturer.

The color of the staining shall produce a multi-color effect that consists of multiple colors replicating varying natural stone coloration. Stain the joints between stones produced by the form liner to create the appearance of grouted joints.

Do not begin staining the structure until earthwork operations are completed to a point where this work can begin without receiving damage. Where this work is adjacent to exposed soil or pavement areas, provide temporary covering protection from overspray or splatter.

C.4 Test Areas

Prior to applying stain to the structure, apply the stain to sample panels measuring a minimum of 48-inches x 48-inches and constructed to demonstrate workmanship in the use of the form liner specified on the structure if applicable. Match or exceed the stain manufacturer's minimum recommended curing time of the concrete or 28 days, whichever is greater, prior to staining. Submit color samples to the City of Madison prior to staining the sample panels. Prepare the concrete surfaces of the sample panels and apply stain using the same materials and in the same manner as proposed for the structure, including staining of the joints between stones produced by the form liner. Do not apply stain to the structure until the City of Madison approves the test panels.

C.5 Surfaces to be Coated.

Apply concrete stain to the surfaces in accordance to the plan.

D Measurement

The department will measure Concrete Staining Multi-Color B-13-0677 in area by the square foot of surface, 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
517.1015.S.01	Concrete Staining Multi-Color B-13-0677	SF

Payment is full compensation for furnishing and applying the coloring system; for preparing the concrete surface; and for constructing and staining the sample panels.

30. Architectural Surface Treatment B-13-0677, Item 517.1050.S.01.

A Description

Construct concrete masonry architectural surface treatments on the exposed concrete surfaces of the structure except the traffic face and ends of the parapets, as detailed in the plans and as hereinafter provided.

B Materials

Use form liners that attach easily to the forming system, and do not compress more than ¼-inch when poured at a rate of 10 vertical feet/hour.

Use a release agent that is compatible with the form liner and coloring materials.

Wall ties shall have set “break-backs” at a minimum of ¾-inches from the finished concrete surface.

Provide a form liner with stone pattern, texture, and finish similar to the form liner on Structure B-13-0577, Milwaukee Street Bridge over West Branch Starkweather Creek, located 0.4 miles west of the project. Provide a 2-inch maximum relief on all surfaces except the traffic face and ends of the parapets as shown on the plans.

Provide a street name insignia as shown on the plans as part of Architectural Surface Treatment B-13-0677.

Obtain approval of the form liner test sample panels from the City of Madison and the engineer prior to the start of forming concrete masonry on the bridge. Contact Steve Sonntag, P.E., (608) 267-1997, for City of Madison approval.

C Construction

C.1 Equipment

Equipment and tools necessary for performing all parts of the work shall be satisfactory as to design, capacity, and mechanical condition for the purposes intended. Repair, improve, replace, or supplement all equipment that is not maintained in full working order, or which is proven inadequate to obtain the results prescribed.

C.2 Form Liner Preparation

Clean the form liner prior to each pour and ensure that it is free of any build-up. Visually inspect each liner for blemishes or tears, and repair if necessary per manufacturer's recommendations.

Apply form release per manufacturer's recommendations.

C.3 Form Liner Attachment

Place adjacent liners less than ¼-inch from each other, attach liner securely to forms in accordance to the manufacturer's recommendations, and coordinate wall ties with form liner and form manufacturer, e.g., diameter, size, and frequency.

C.4 Surface Finishing

Ensure that the textured surface is free of laitance; sandblasting is not permitted.

Grind or fill pouring blemishes.

D Measurement

The department will measure Architectural Surface Treatment B-13-0677 in area by the square foot of architectural surface, 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
517.1050.S.01	Architectural Surface Treatment B-13-0677	SF

Payment is full compensation for producing the proposed architectural surface treatment including: preparing the foundation; finishing and protecting the surface treatment; and for properly disposing of surplus material.

31. Architectural Surface Treatment Traffic Face B-13-0677, Item 517.1050.S.02.

A Description

Construct concrete masonry architectural surface treatments on the exposed concrete surfaces of the structure on the traffic face and ends of the parapets, as detailed in the plans and as hereinafter provided.

B Materials

Use form liners that attach easily to the forming system, and do not compress more than ¼-inch when poured at a rate of 10 vertical feet/hour.

Use a release agent that is compatible with the form liner and coloring materials.

Wall ties shall have set “break-backs” at a minimum of ¾-inches from the finished concrete surface.

Provide a form liner with stone pattern, texture, and finish similar to the form liner on Structure B-13-0577, Milwaukee Street Bridge over West Branch Starkweather Creek, located 0.4 miles west of the project. Provide a ½-inch maximum relief on the traffic face and ends of the parapets as shown on the plans.

Obtain approval of the form liner test sample panels from the City of Madison and the engineer prior to the start of forming concrete masonry on the bridge. Contact Steve Sonntag, P.E., (608) 267-1997, for City of Madison approval.

C Construction

C.1 Equipment

Equipment and tools necessary for performing all parts of the work shall be satisfactory as to design, capacity, and mechanical condition for the purposes intended. Repair, improve, replace, or supplement all equipment that is not maintained in full working order, or which is proven inadequate to obtain the results prescribed.

C.2 Form Liner Preparation

Clean the form liner prior to each pour and ensure that it is free of any build-up. Visually inspect each liner for blemishes or tears, and repair if necessary per manufacturer’s recommendations.

Apply form release per manufacturer’s recommendations.

C.3 Form Liner Attachment

Place adjacent liners less than ¼-inch from each other, attach liner securely to forms in accordance to the manufacturer’s recommendations, and coordinate wall ties with form liner and form manufacturer, e.g., diameter, size, and frequency.

C.4 Surface Finishing

Ensure that the textured surface is free of laitance; sandblasting is not permitted.

Grind or fill pouring blemishes.

D Measurement

The department will measure Architectural Surface Treatment Traffic Face B-13-0677 in area by the square foot of architectural surface, 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
517.1050.S.02	Architectural Surface Treatment Traffic Face B-13-0677	SF

Payment is full compensation for producing the proposed architectural surface treatment including: preparing the foundation; finishing and protecting the surface treatment; and for properly disposing of surplus material.

32. Adjusting Manhole Covers.

This work shall be according to the pertinent provisions of standard spec 611, as shown on the plans, and as hereinafter provided.

Revise standard spec 611.3.7 by deleting the last paragraph.

Set the manhole frames so that they comply with the surface requirements of standard spec 450.3.2.9. At the completion of the paving, a 6-foot straightedge shall be placed over the centerline of each manhole frame parallel to the direction of traffic. A measurement shall be made at each side of the frame. The two measurements shall be averaged. If this average is greater than 5/8 inches, reset the manhole frame to the correct plane and elevation. If this average is 5/8 inches or less but greater than 3/8 inches, the manhole frame shall be allowed to remain in place but shall be paid for at 50 percent of the contract unit price.

If the manhole frame is higher than the adjacent pavement, the two measurements shall be made at each end of the straightedge. These two measurements shall be averaged. The same criteria for acceptance and payment as above, shall apply.

611-005 (20030820)

MMSD will supply a casting and a rubber adjustment ring for manhole MMSD MH 06-209 located at Station 8+33.86 LT 17.13'.

33. Storm Sewer, General.

Construct all storm sewers in accordance to the pertinent provisions of standard specs 608 and 610 as shown on the plans and as follows.

Prior to ordering drainage pipes and structures, verify related drainage information in the plan with the engineer. Include all information obtained from the bid item Utility Line Opening (ULO), Item SPV.0060.01.

Seal the joints for reinforced concrete pipe with either mastic or internal rubber gaskets as described in standard specs 607.2.2 and 607.3.4. The use of mortar as a pipe joint method is prohibited.

Lay all storm sewer on a bed of dense graded base 1 1/4-inch in accordance to standard spec 305.2.2.1 or when water is encountered, No. 1 course concrete aggregate in accordance to standard spec 501.2.5.4.4, and as shown on the plan details. The aggregate is incidental to the unit prices for the storm sewer pipe. Any dewatering required is incidental to the unit prices for storm sewer pipe.

Maintain drainage during construction staging while storm sewer is being constructed to prevent saturation of the subgrade and flooding of the roadway. This work may require temporary pumping of existing or new storm sewer facilities. Consider work incidental to the installation of storm sewer.

Construct all manholes square in shape and construct all inlets rectangular in shape. All structures shall be reinforced concrete. Concrete brick and blocks options are prohibited.

Install the 'Concrete Pipe Support' detail when required by the engineer. Consider work incidental to the installation of the affected storm sewer pipe.

Bid all structures (manholes and inlets) as field poured, and construct as field poured unless approval has been given by the City of Madison to precast the structures. This approval will not be given until it can be confirmed that the proposed design will fit existing conditions including possible utility conflicts. No authorization for precast approval for any structure until such time as all ULO's that could affect the structure/structures in question have been completed and the City of Madison has had a minimum of three working days to review all the relevant information.

Further, submit shop drawings for all precast structures to the City of Madison. The City of Madison must approve or reject the shop drawings within three days. Under no circumstance shall a precast structure be brought to or used on the construction site without a written approval of the shop drawing for that structure prior to its use on site.

Do not use station and offset exclusively for final layout of structures, as given on the storm plans, for inlet structures. Determine the curb line in the area of the inlet prior to pouring the inlet structure to assure proper location of the inlet relative to the curb line.

No precast storm sewer structure may be ordered or received on site unless all ULO's have been completed and the engineer has provided his/her written approval of the shop drawings for the structure.

It is the intention of the City of Madison to remove existing clay pipe within the street right-of-way. If clay pipe is discovered that was not identified on the plans, remove and replace this pipe after receiving prior approval from the construction engineer. Note that unknown clay pipes uncovered will require investigation to determine if live or dead.

Salvage all existing inlet, manhole, and catch basin covers that are not being adjusted and reused on the project for the City of Madison.

When salvaged, contact Rennie Richardson, City of Madison Department of Public Works at (608) 267-1973 to schedule pickup and to allow city personnel to inspect the castings and determine which are suitable to be picked up.

Remove and dispose of any frames, grates and all other material the city does not want.

34. Pipe Grates, Item 611.9800.S.

A Description

This special provision describes furnishing and installing pipe grates on the ends of pipes as shown in the plans, and as hereinafter provided.

B Materials

Furnish steel conforming to the requirements of standard spec 506.2.2.1. Furnish steel pipe conforming to the requirements of standard spec 506.2.3.6.

Furnish pipe grates galvanized according to ASTM A123.

Furnish angles and brackets galvanized according to ASTM A123.

Furnish required hardware galvanized according to ASTM A153.

C Construction

Repair pipes, rods, angles and brackets on which the galvanized coating has been damaged in accordance to the requirements of AASHTO M36M.

D Measurement

The department will measure Pipe Grates in units of work, where one unit is one grate, completed and accepted.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
611.9800.S	Pipe Grates	Each

Payment is full compensation for furnishing and installing all materials; and for drilling and connecting grates to pipes.

611-010 (20030820)

35. Fence Safety, Item 616.0700.S.

A Description

This special provision describes furnishing and installing a plastic fence at locations shown on the plans and as hereinafter provided.

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
Service Temperature:	-60° F to 200° (ASTM D648)
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.

616-030 (20070510)

36. Conduit Special 2-Inch.

Revise standard spec 652.3.1.1(1) as follows:

Under the Conduit Special bid item, the contractor shall use rigid nonmetallic conduit schedule 80.

37. Lighting Systems.

All underground conduit and concrete base forms are to be inspected by the engineer before any trench is backfilled or concrete is poured. Any work completed without such inspection is subject to rejection as unacceptable work and immediately removed and

replaced or otherwise satisfactorily corrected by and at the expense of the contractor. It is the contractor's responsibility to arrange for inspections. There will not be any additional compensation to the contractor for delays and inconveniences associated with arranging and waiting for inspections.

Conform work and materials relating to the lighting systems to applicable rules and requirements of the National Fire Protection Association, national and state electrical codes, local codes and ordinances, local utility regulations, applicable provisions of standard specifications, these special provisions, and OSHA.

Give the proper authorities required notice relating to the project, obtain required permits and licenses, pay all fees incidental thereto, and deliver upon completion of the work, without extra cost, required certificates of inspection and approval. Providing materials listed by UL or other approved agencies and all governing codes and ordinances is the responsibility of the manufacturer. Materials must bear a UL and/or other approved labels, where possible. Items specified by catalog number of brand name and shop drawing approval will not relieve the manufacturer of this responsibility.

On completion of the work, test the installation to ensure that it is entirely free of grounds and short circuits. This contract contemplates and intends a complete and operating installation of electrical work. Everything in the form of labor or material necessary for this result is in the intent of the contract.

It must be understood that electrical drawings and details are diagrammatic; they are not intended to be shop drawings. It is expected it may be necessary to move conduit, and/or equipment in some cases, to get a coordinated installation. Such changes are considered part of the contract obligation, without cost to the owner. Do not locate equipment where its usefulness and/or operation may be affected by the work of other trades, door swing, counter, equipment, etc.

The contractor acknowledges his acquaintance with the plans and specifications and their respective requirements, and guarantee the electrical system has been installed strictly in accordance to the electrical plans and specifications, using only the best of materials available and installed in a substantial manner by experienced labor. The contractor agrees to replace and/or repair items failing from causes of faulty workmanship, material or design, without extra cost, at any time within one year from the date of final acceptance.

Ground wires must have green insulation or be marked with green tape at all junction or pull boxes and at all terminations. Ground equipment and enclosures, clean the ground connection surfaces, and make connections so it is impossible to move them.

Normal maintenance of existing street light luminaires (ballast or lamp failures, etc.) will be the City of Madison's responsibility. Maintain the new street lights until project work is accepted. This work is considered incidental to installation of street light units, structures and ducts, and no separate compensation will be paid.

Work performed on lighting systems shall be in accordance to the Wisconsin Electrical Code and applicable provisions of standard spec 659.

Furnish and install incidental items, such as wire nuts, grommets, tape, connectors, electrical varnish, etc., that are obviously necessary to make the proposed system complete from the source of supply to the most remote unit.

Provide rust, corrosion and anti-seize protection at threaded assemblies by coating the mating surfaces with Markal (Hightemp E-Z Break), Never-Seez (marine grade), LPS 100, Lubriplate or approved equal.

Touch up marks and scratches on painted equipment with two coats of synthetic resin enamel or as directed by the engineer.

Submit one copy of as-built plans, including cable and conduit routing diagrams, wiring of fixtures and other pertinent details, to the engineer and the City of Madison.

Furnish equipment and appliances necessary to test the complete installation of electrical conductors. Test and demonstrate to the satisfaction of the engineer that the circuits are properly connected, continuous and free from short circuits and unspecified grounds, that the circuits are connected in accordance to the manufacturer's wiring layout, and that each circuit is operational. The lighting system is not deemed complete until the electrical work has been completed and the electrical systems are found to be in proper working order, including operation for ten (10) consecutive nights without failure.

38. Temporary Crosswalk Access, Item SPV.0045.01.

A Description

Maintain accessible crosswalks crossing the construction zone on existing pavement, new pavement, or temporary surface material. Provide an accessible crosswalk at the existing crossings.

B Materials

Furnish a hard temporary surface material consisting of asphaltic surface temporary in accordance to standard spec 465.2, any grade of concrete in accordance to standard spec 602.2, skid resistant steel plating, or alternative material as approved by the engineer. Gravel or base course material is not acceptable.

Furnish 4-inch diameter polyvinyl chloride drainage pipe conforming to AASHTO M 278.

Furnish a protective layer for use in protecting the existing curb and gutter and existing pavement from asphaltic surface temporary in order to allow easy removal of asphaltic surface. Obtain approval from the engineer for the protective layer material.

Furnish safety fence in accordance to the Fence Safety article in these special provisions.

C Construction

C.1 Crosswalk

Install, maintain, move, and remove temporary surface material at Temporary Crosswalk Access locations as shown on the plans and as directed by the engineer. Level and compact the surface prior to placing temporary surface material. The temporary crosswalk shall have a minimum clear width of 4 feet; be located outside the immediate work area, as approved by the engineer; and meet the requirements of the current Americans with Disabilities Act Accessibility Guidelines (ADAAG). Install safety fence along both sides of the temporary crosswalk when the temporary crosswalk crosses the work zone. Safety fence is not required for temporary crosswalks across side streets when the crosswalk access is outside the work zone. Provide a gap in the safety fence as necessary to provide access for construction vehicles across the temporary crosswalk. The maximum width of the gap shall be 18 feet. Reconstruct Temporary Crosswalk Access when disturbed by construction operations or utility trenches.

C.2 Temporary Curb Ramp

Place 4-inch PVC drainage pipe in the flow line of the curb and gutter to maintain storm water drainage.

Place a protective layer between the existing curb and gutter or existing pavement and the asphaltic surface or concrete for temporary curb ramp.

For the portion of the temporary curb ramp in the terrace area, form the foundation by excavating at least 3 inches. Tamp or compact the foundation to ensure stability.

Place asphaltic surface temporary in accordance to standard spec 465.3.1 or place concrete in accordance to standard spec 602.3.2.3, and as shown in the plan.

Maintain temporary curb ramps until permanent curb ramps and crosswalks are in place and open to pedestrian traffic as directed by the engineer.

Remove temporary curb ramps once permanent curb ramps and crosswalks are open and restore the site.

D Measurement

The department will measure Temporary Crosswalk Access by the day, acceptably completed. The measured quantity will equal the number of calendar days a crosswalk through or around the work area is open to pedestrian traffic. A crosswalk is defined as an accessible crossing of a single leg of an intersection with existing, temporary, or finished curb ramps meeting ADA requirements. A crossing of a street with an island within the route will be considered a single crosswalk. Each day that the crosswalk is out of service for more than 2 hours will result in one day being deducted from the quantity measured for payment.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0045.01	Temporary Crosswalk Access	Day

Payment is full compensation for furnishing, loading, and hauling materials; for preparing the foundation; for furnishing, placing, maintaining, and removing temporary surface material; for reconstructing or relaying the temporary surface material; and for furnishing and installing, and maintaining safety fence.

39. Utility Line Opening (ULO), Item SPV.0060.01.**A Description**

This special provision describes performing the necessary excavation to uncover utilities for the purpose of determining elevation and potential conflicts with proposed storm sewer or other work, as shown on the plans or as directed by the engineer.

B (Vacant)**C Construction**

Perform the excavation in such a manner that the utility in question is not damaged and the safety of the workers or area is not compromised.

Perform the utility line openings as soon as possible and at least 10 days in advance of proposed utility construction to allow any conflicts to be resolved with minimal disruption. Prior to ordering structures, perform ULO's. Where utilities are within 6 feet of each other at a potential conflict location, only one utility line opening is called for. In these cases, a single utility line opening will be considered full payment to locate multiple utilities. Utility line openings include a trench up to 10 feet long as measured at the trench bottom, and of any depth required to locate the intended utility.

Obtain prior approval for all utility line openings from the engineer and coordinate all ULOs with the engineer. Notify the utility engineers or their agents of this work a minimum of three days prior to the work so they may be present when the work is completed. Verify the need for performing ULO's as shown on the plans, since some of the utilities may have been or will be relocated prior to the start of construction.

D Measurement

The department will measure Utility Line Opening (ULO) by each unit, 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
SPV.0060.01	Utility Line Opening (ULO)	Each

Payment is full compensation for the excavation required to expose the utility line; backfilling with existing material removed from the excavation; compacting the backfill material; restoring the site; and for cleanup.

Existing pavement, concrete curb, gutter, and sidewalk removals necessary to facilitate utility line openings shall not be considered part of or paid for under Utility Line Openings, but are considered separate and measured and paid for separately as removal items. Replacement pavement, concrete curb, gutter, and sidewalk items shall also be considered separate from Utility Line Openings and will be measured and paid for separately.

40. Catch Basin 6x6-Ft Special Item SPV.0060.02.

A Description

This special provision describes constructing Catch Basin 6x6-Ft Special as detailed in the plan and in accordance to standard spec 611.

B Materials

Furnish materials in accordance to standard spec 611.2.

C Construction

Construct Catch Basin 6x6-Ft Special per the *City Standard Specifications*, Standard Detail Drawing 5.7.4 and in accordance to standard spec 611.3.

D Measurement

The department will measure Catch Basin 6x6-Ft Special by each unit, acceptably completed, in accordance to standard spec 611.4.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.02	Catch Basin 6x6-Ft Special	Each

Payment is full compensation for furnishing all work, materials, labor, and incidentals required to complete the work set forth in the description.

41. Manhole Cover Type Special Logo, Item SPV.0060.03.

A Description

This special provision describes furnishing and installing manhole covers.

B Materials

Furnish manhole covers in accordance to standard spec 611.2, the plan details and Article 507 of the city standard specifications.

C Construction

Install manhole covers in accordance to standard spec 611.3.

D Measurement

The department will measure Manhole Cover Special Logo by each unit, 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
SPV.0060.03	Manhole Cover Type Special Logo	Each

Payment is full compensation for furnishing new covers, including frames, grates, curb plates and all other required materials; for installing and adjusting each cover; and for furnishing all equipment, labor, tools, and incidentals necessary to complete the contract work.

42. Sanitary Sewer Access Structure, 4-Foot Diameter, Item SPV.0060.04.**A Description**

This special provision describes installing Sewer Access Structures at the depths and locations shown on the plan.

B Materials

Provide precast concrete Sanitary Sewer Access Structure (4-Foot Diameter) meeting the requirements of Standard Detail Drawing 5.7.2, 5.7.15, and Article 507.3 of the City of Madison Standard Specifications for Public Works Construction – 2014 Edition.

Furnish and install Sewer Access Structure Frames and Covers, in accordance to Standard Detail Drawing 5.7.16 of the City of Madison Standard Specifications for Public Works Construction – 2014 Edition, will be paid for separately under the Manhole Covers Type Special Logo, Bid Item SPV.0060.03.

C Construction

Install Sanitary Sewer Access Structure (4-Foot Diameter) in accordance to Article 507.3 of the City of Madison Standard Specifications for Public Works Construction – 2014 Edition. Maintain the normal flow of wastewater at all times during installation of the new sanitary sewer access structure and when connecting pipes to the new structure. All bypass pumping, temporary piping, and/or temporary connections, which are required to maintain the normal flow of wastewater throughout construction, is incidental to this bid item.

Construct concrete benches and flow lines as directed by the City of Madison or as directed by the engineer.

D Measurement

The department will measure Sanitary Sewer Access Structure (4-Foot Diameter) by each unit, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.04	Sanitary Sewer Access Structure, 4-Foot Diameter	Each

Payment is full compensation for furnishing and installing sewer access structures; for excavation and disposal of excess material; for constructing benches and flow lines; for furnishing and installing all bypass or temporary piping and connections; and for backfilling.

43. Sanitary Sewer Tap, Item SPV.0060.05.

A Description

This special provision describes connecting new laterals or main to an existing structure and connecting an existing lateral or main to a new structure.

B Materials

Provide Kor-n-Seal flexible connector, or approved equal, in the tapped hole, in accordance to Standard Detail Drawing 5.7.31 of the City of Madison Standard Specifications for Public Works Construction- 2014 Edition.

C Construction

C.1 New Pipe to Existing Structure

Use a portable coring drill to produce a pipe opening that is round, clean and free of any pitting of the concrete.

Make a watertight connection of the pipe to the sewer access structure with a Kor-n-Seal-flexible connector, or approved equal, in accordance to Standard Detail Drawing 5.7.31 of the City of Madison Standard Specifications for Public Works Construction - 2014 Edition.

C2. Existing Pipe to New Structure

Provide a flexible connector to connect the existing pipe to any new pipe which is required to make the connection to the structure.

Provide PVC (SDR-35) that matches the existing pipe's diameter, or the next larger diameter, to reconnect the existing sewer main or lateral. The PVC (SDR-35) sanitary sewer pipe is considered incidental to this bid item.

The pouring and construction of concrete benches and flowlines in new sewer access structures for the inlet or outlet pipes is not included in this bid item and is considered incidental to the bid item Sanitary Sewer Access Structure (4-Foot Diameter).

The downstream pipe connection to a Sewer Access Structure (4-Foot Diameter) is considered incidental to the Sewer Access Structure (4-Foot Diameter).

D Measurement

The department will measure Sanitary Sewer Tap by each unit, 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
SPV.0060.05	Sanitary Sewer Tap	Each

Payment is full compensation for providing all connectors; for coring; and for furnishing all work, materials, labor and incidentals required to complete the work.

44. Sewer Electronic Markers, Item SPV.0060.06.

A Description

This special provision describes installing Sewer Electronic Markers in accordance to Article 503.2 of the City of Madison Standard Specification for Public Works Construction - 2014 Addition. These sewer electronic markers will be installed where called for on the plan set above sanitary sewer and storm sewer facilities.

B Materials

All materials are described in Article 503.2(f) of the City of Madison Standard Specification for Public Works Construction- 2014 Edition. Markers will be provided by the City of Madison.

C Construction

Install Sewer Electronic Markers (sanitary) in accordance to Article 503.2(f) of the Standard Specifications for Public Works Construction– 2014 Edition.

For storm sewer, place a marker ball for each storm tap located above the connection on the storm sewer main, as shown on plans. Place the marker ball so the marker ball will be no deeper than 4.5-feet below finished grade and directly above the storm lateral. If the location of the lateral is below 4.5 feet from finished grade, partially backfill trenches prior to placement of the marker ball at the desired locations.

Notify the engineer when marker balls are installed. Each marker ball will be tested by the city after completion of final pavement surface to confirm that it is installed and functioning properly. If it is not installed or functioning, excavate to expose the existing marker ball or lateral and place a new marker ball. No additional compensation will be provided for this work.

D Measurement

The department will measure Sewer Electronic Markers by each unit, 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
SPV.0060.06	Sewer Electronic Markers	Each

Payment is full compensation for furnishing all work, materials, labor and incidentals required to complete the installation and all associated work to provide a complete functioning system. The department will not pay for replacing those marker balls that are non-functional. Balls will be provided by the City of Madison.

45. Sanitary Lateral Reconnect, Item SPV.0060.07.**A Description**

This special provision describes sanitary sewer lateral connections encountered during the course of this project that connect to the sanitary sewer main.

B Material

Furnish sanitary sewer pipe and fittings that are solid-wall Poly Vinyl Chloride (PVC) and that conform to the requirements of the Specification for PVC Sewer Pipe and Fittings, ASTM D 3034.

For lateral wye connections to 8" diameter sewer main, provide sanitary sewer pipe and fittings having a standard dimension ratio of 35.

Assemble joints using or elastomeric or solvent cement as recommended by the pipe manufacturer. The assembled joints will be required to pass the performance tests as required in ASTM D3212 elastomeric or ASTM D2564-solvent cement.

C Construction

The pipe for the connection of laterals is not to exceed a length of 5 feet.

Install risers, where necessary, in accordance to Standard Detail Drawing 5.3.1 of the City of Madison Standard Specifications for Public Works Construction- 2014 Edition. Risers five feet in length are included in the bid item Sanitary Lateral Reconnect. Backfill and compaction in accordance to Article 202.3(b) of the City of Madison Standard Specifications for Public Works Construction-2014 Edition utilizing select fill.

D Measurement

The department will measure Sanitary Lateral Reconnect as each individual sanitary sewer reconnect, acceptably completed.

Sanitary sewer lateral pipe exceeding 5 feet in length will be paid under bid item Sanitary Sewer Lateral, Item SPV.0090.04.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.07	Sanitary Lateral Reconnect	Each

Payment is full compensation for furnishing all materials, including fill material; plugging the ends of all sewer mains and sewer laterals; excavation; trimming and chipping; cutting, protecting or removing reinforcing steel; disposal of surplus materials from the structure or excavation; excavation and compaction of the backfill material; and for restoring the site.

46. Remove Sanitary Sewer Structure, Item SPV.0060.08.

A Description

This special provision describes removing sanitary sewer access structures as shown on the plans. The work includes salvaging and disposing of the resulting materials and backfilling the trenches with select fill.

B Materials

Provide select fill meeting the requirements of Article 202.2 of the City of Madison Standard Specifications for Public Works Construction - 2014 Edition; furnishing and placing select fill in void created by the structure removal is included with this bid item.

C Construction

Remove sanitary sewer access structures in accordance to Article 203.2(a) of the City of Madison Standard Specifications for Public Works Construction - 2014 Edition. Sewer mains and laterals that are connected to a removed Sanitary Sewer Access Structure will be plugged with a concrete plug incidental to the removal of the structure. Payment for Concrete Slurrying of an entire sewer main or lateral will be paid for separately under Abandon Sanitary Sewer - Pipe Plug, Item SPV.0060.09.

D Measurement

The department will measure Remove Sanitary Sewer Structure as each individual unit, 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
SPV.0060.08	Remove Sewer Access Structure	Each

Payment is full compensation for furnishing all materials, including fill material; for disposal of surplus materials; excavation and compaction of select fill material; restoring the site; and for furnishing all labor, tools equipment, and incidentals necessary to complete the contract work.

47. Abandon Sanitary Sewer - Pipe Plug, Item SPV.0060.09.

A Description

This special provision describes plugging pipes as shown in the plans and hereinafter provided. In accordance with Article 203.2c City of Madison Standard Specifications for Public Works Construction 2014 Edition Article 203.2(c), any pipe found in a trench that is less than 10" in diameter while installing a sewer facility will be considered incidental to the pipe being installed.

B Material

Provide concrete conforming to Article 301 of the City of Madison Standard Specifications for Public Works Construction - 2014 Edition

C Construction

Abandon sanitary sewer pipe with a plug in accordance to Article 203 of the City of Madison Standard Specifications for Public Works Construction - 2014 Edition.

Provide replacement sanitary sewers and laterals or appropriate bypass pumping prior to abandoning sanitary sewer pipe.

Saw cut end of existing pipe and clean interior of pipe to create a good bonding surface. Form and pour a minimum 1-FT deep concrete plug completely filling the opening of the pipe.

Any pipe plugs required to abandon or remove a sewer access structure (pipes directly connected to the structure) will be considered incidental to abandoning or removing the structure regardless of the size of the pipe being abandoned

Any plugs required to abandon the existing sanitary main where laterals are being extended will be considered incidental to sanitary sewer lateral (Sanitary Sewer Lateral, Item SPV.0090.04).

D Measurement

The department will measure Abandon Sanitary Sewer - Pipe Plug by each individual unit, 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
SPV.0060.09	Abandon Sanitary Sewer – Pipe Plug	Each

Payment is full compensation for furnishing all materials, labor, tools, equipment and incidentals necessary to complete this item of work.

48. Water Valve Access Structure, Item SPV.0060.10.

A Description

Furnish and install a 6-foot (inside diameter) water valve access structure with steps and casting. The work also includes preparing the foundation for the structure and tapping the water main.

B Materials

Refer to Article 702 of the *City Standard Specifications*.

Adjustment rings and castings: Conform to Articles 503 and 507.

The water valve access structure has a flat top with an offset opening and a standard access structure frame and non-rocking cover.

See Standard Detail Drawing 7.07 for additional material details.

C Construction

Refer to Article 507, 703, Standard Detail Drawing 7.07 of the *City Standard Specifications* and this section.

Center the water valve access structure over the valve.

Place clear gravel and stones up to 3-inches as a base for the structure.

Place an 8-inch or larger concrete block under the valve to provide support.

Provide appropriate openings in the structure and the support ring so that the structure is not resting on the water main.

Install a 1-inch tap (corporation stop, to remain closed) on each side of the valve.

D Measurement

The department will measure Water Valve Access Structure as each individual unit, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.10	Water Valve Access Structure	Each

Payment is full compensation for furnishing, preparing the foundation, and installing water valve access structures, including all materials, labor, tools, equipment and incidentals necessary to complete this item of work.

49. Furnish and Install 6-Inch Valve, Item SPV.0060.11; Furnish and Install 8-Inch Valve, Item SPV.0060.12; Furnish and Install 10-Inch Valve, Item SPV.0060.13; Furnish and Install 12-Inch Valve, Item SPV.0060.14.

A Description

Furnish and install water main valves and associated accessories. Work for this item also includes, but is not limited to:

1. Mechanical joint restraint.
2. Valve boxes and box extensions.
3. Valve box adjustments.

B Materials

Refer to Articles 702 and 704 the *City Standard Specifications* and this section.

Valves 12-inches and smaller - Requirements:

1. Resilient Wedge Gate Valves.
2. Meets the requirements of AWWA C509- latest revision.
3. Supplied with mechanical joints.
4. Supplied with conductive mechanical joint (no lead) gaskets.
5. Open to the left.
6. Non-rising stem.
7. O-ring packing.
8. 2-inch square operating nut.

C Construction

Install valves in accordance to sections 703 and 704 of the *City Standard Specifications*.

Furnish and install valve box extensions where needed. All valve box extensions are incidental to the installation of the valve.

D Measurement

The department will measure Furnish and Install (Inch) Valve as each individual unit, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.11	Furnish and Install 6 Inch Valve	Each
SPV.0060.12	Furnish and Install 8 Inch Valve	Each
SPV.0060.13	Furnish and Install 10 Inch Valve	Each
SPV.0060.14	Furnish and Install 12 Inch Valve	Each

Payment is full compensation for furnishing and installing water system valves and valve boxes, including all materials, labor, tools, equipment and incidentals necessary to complete this item of work.

50. Furnish and Install Hydrant, Item SPV.0060.15.

A Description

Furnish and install fire hydrants and associated thrust restraints. Adjust hydrant as necessary.

Prepare a proper drain field for the hydrant. Restore all disturbed terrace or turf areas.

B Materials

Refer to Article 702 of the *City Standard Specifications* and this section.

C Construction

Install all hydrants in accordance to Hydrant Detail Drawing and Sections 703 and 704 of the City of Madison *City Standard Specifications*.

D Measurement

The department will measure Furnish and Install Hydrant as each individual unit, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.15	Furnish and Install Hydrant	Each

Payment is full compensation for furnishing and installing hydrants, including all materials, labor, tools, equipment, restoration and incidentals necessary to complete this item of work.

51. Disconnect and Reconnect 1-Inch Service Lateral, Item SPV.0060.16.

A Description

Cut off, and typically shorten, existing copper water service laterals and connect the lateral to the new water main. Restore any disturbed terrace areas, as necessary.

B Materials

Refer to Article 702 of the *City Standard Specifications*.

C Construction

Refer to Article 703 of the *City Standard Specifications* and this section.

Excavate and expose the existing service lateral at the location of the new water main crossing.

Cut-off the service tubing at the exposed crossing location.

Couple the disconnected end of the service tubing with a new service of the designated size.

Reconnect the modified service length to the corporation stop on the new water main.

D Measurement

The department will measure Disconnect and Reconnect 1-Inch Service Lateral as each individual unit, 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
SPV.0060.16	Disconnect and Reconnect 1-Inch Service Lateral	Each

Payment is full compensation for disconnecting existing water service laterals and reconnecting the existing laterals to new water mains, including all materials, labor, tools, equipment and incidentals necessary to complete this item of work.

52. Cut-In or Connect-To Existing Water System, Item SPV.0060.17.

A Description

Cut-In Connection consists of all means and methods, equipment, tools, labor, and incidentals necessary for making a plug-removal connection or a cut-in connection to existing water mains, including any necessary water-tight capping of existing water mains associated with the work.

B Materials

Refer to Article 702 of the *City Standard Specifications*.

C Construction

Refer to Article 703 of the *City Standard Specifications* and this section.

Excavate and expose the existing water main to a point 18-inches below the bottom of the pipe at the proposed location of the plug-removal connection or cut-in connection.

Shut off all valves required to isolate the exposed pipe segment. Be responsible and properly equipped for valve-turning at all times while doing such work.

Place a water pump at the bottom of the excavation for dewatering, as needed. When cutting out sections of pipe proceed slowly and ensure dewatering efforts prevent the water level within the excavation from rising above the invert elevation of the exposed pipe.

Before placing new pipe and fittings on the exposed end of the existing fitting or the cut-off end of the existing pipe, disinfect the new fitting or valve by swabbing or soaking thoroughly with a 10:1 (water:bleach) solution.

Fasten new fittings to existing fittings or ductile iron pipes as described in Article 703 of the *City Standard Specifications*. For connections to existing cast iron or other existing pipe materials, secure the new pipe or fitting with threaded rods in accordance to the Standard Detail Drawings.

For cut-in connections or as otherwise necessary, secure the disconnected end of the existing pipe with either a pipe plug or a cap fitting, as approved by the engineer. Place standard thrust blocking between the end of the existing pipe and the new fitting, unless specified otherwise in the Contract Documents or as directed by the engineer.

D Measurement

The department will measure Cut-In or Connect-To Existing Water System as each individual unit, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.17	Cut-In or Connect-To Existing Water System	Each

Payment is full compensation for performing a cut-in or fitting connection to existing water mains, including all materials, labor, tools, equipment and incidentals necessary to complete this item of work.

53. Furnish Excavation and Ditch for Live Tap, SPV.0060.18.

A Description

Excavate and prepare the ditch for the city to perform a live-tap connection on an existing water main. Upon completion of tap, cut-off and cap the existing water main.

B Materials

Refer to Article 702 of the *City Standard Specifications*.

C Construction

Refer to Article 703 of the *City Standard Specifications* and this section.

Prepare a suitable work area in the ditch for the engineer to perform the live-tap:

Expose the water main across the full width of the ditch.

Provide at least 1-foot of clear space around the circumference of the exposed water main.

Locate and identify the proposed tap location in the ditch and adjust as necessary to maintain a distance of at least 18-inches from the nearest joint.

Provide at least a 4-foot-wide clear working area, extending at least 6-feet perpendicular from the main at the location of the live-tap.

Upon completion of the live-tap by the city, cut-off and cap the existing water main in accordance to Article 704 of the *City Standard Specifications* – ‘Cut Off Existing Water Main’. The cut-off and cap work associated with the live-tap is incidental to the work and will not be paid separately.

D Measurement

The department will measure Furnish Excavation and Ditch for Live Tap as each individual unit, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.18	Furnish Excavation and Ditch for Live Tap	Each

Payment is full compensation for furnishing excavation and ditches to perform live tap water main connections, including all labor, tools, equipment, backfill material and incidentals necessary to complete this item of work.

54. Cut Off Existing Water Main, Item SPV.0060.19.

A Description

Abandon and plug a segment of existing water main by “cutting it off” from the active water system. The work also includes securely capping or plugging the cut end of the active main.

B Materials

Refer to Article 702 of the *City Standard Specifications*.

C Construction

Refer to Article 703 of the *City Standard Specifications* and this section.

Prior to proceeding with the cut-off, perform the required water main shut-off notifications.

When authorized to proceed, isolate and shut-off the existing water main.

Cut off the water main at the location designated for abandonment.

Install a concrete pipe plug in the end of the existing main which is to be abandoned.

On the end of the water main which is to remain in-service:

1. Install a restrained mechanical joint cap over the cut end of the existing water main, or within 2-feet of a fitting or live-tap.
2. Otherwise, install a restrained mechanical joint plug fitting into a new or existing fitting located at the end of the main.

If the water main cut off work is intended to remove and replace an existing fitting, valve, or segment of pipe, cut off as designated, remove the existing material and replace it with the new fittings and/or the lengths of pipe and solid sleeves necessary to reconnect to the existing main.

Disinfect any associated materials by swabbing methods in accordance to Article 703 of the *City Standard Specifications*.

D Measurement

The department will measure Cut Off Existing Water Main as each individual unit, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.19	Cut Off Existing Water Main	Each

Payment is full compensation for cutting off and installing mechanical joint caps on existing water mains, including furnishing all materials, labor tools, equipment and incidentals necessary to complete this item of work.

55. Abandon Water Valve Box, Item SPV.0060.20.

A Description

Abandon valve boxes within the project limits that are set upon valves no longer in service. Place the abandoned valve in the closed position prior to abandoning the box. Completely remove the valve box whenever possible.

B Materials

Refer to Article 702 of the *City Standard Specifications*.

C Construction

Refer to Article 703 the *City Standard Specifications* and this section.

Proceed with work only after the existing water main has been abandoned.

Remove the top casting of the valve box to a point at least 3-feet below the final elevation, and then backfill the opening.

Any associated surface restoration work, including concrete or asphalt surface restoration, necessary as a result of the valve box abandonment being located beyond surfaces called to be replaced is considered incidental to this work.

D Measurement

The department will measure Abandon Water Valve Box as each individual unit, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.20	Abandon Water Valve Box	Each

Payment is full compensation for abandoning existing valve boxes, including furnishing all materials, labor, tools, equipment, restoration and incidentals necessary to complete this item of work.

56. Abandon Water Valve Access Structure, Item SPV.0060.21.

A Description

Abandon all water valve access structures or manholes as indicated on the drawings or ordered by the engineer. This work includes but is not necessarily limited to; all materials, including valve box, if required; equipment; labor; select fill; and incidentals necessary to complete the work.

B Materials

Refer to Article 702 of the *City Standard Specifications*.

C Construction

Refer to Article 703 the *City Standard Specifications* and this section.

Remove the casting and structure walls. If concrete is in contact with a main and/or valve that is to remain in service, and removal of the structure may damage the existing piping system, the engineer may instead require that the structure walls be removed to a depth of 3-feet below finished grade.

D Measurement

The department will measure Abandon Water Valve Access Structure as each individual unit, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.21	Abandon Water Valve Access Structure	Each

Payment is full compensation for abandoning existing water valve access structures, including furnishing all materials, labor, tools, equipment, restoration and incidentals necessary to complete this item of work.

57. Remove and Salvage Existing Hydrant, Item SPV.0060.22.

A Description

Decommission and salvage designated existing fire hydrants. Restore any disturbed turf areas.

B Materials

Refer to Article 702 of the *City Standard Specifications*.

C Construction

Refer to Article 703 of the *City Standard Specifications* and this section.

Do not proceed with hydrant abandonments until the existing water main has been abandoned.

For screw type hydrants:

1. Unscrew the hydrant with chain tongs (or like), and remove the high stock, and salvage for the engineer.
2. Remove the frost case and salvage for the engineer.

For non-screw type hydrants:

1. Excavate to the bottom of the hydrant and disassemble/disconnect it from the hydrant lead.
2. Remove the hydrant and salvage for the engineer.

Backfill the remaining opening/excavation with existing material and compact.

Use select fill as additional material if there is not enough approved existing backfill material.

Restore all disturbed turf areas associated with the hydrant abandonment.

D Measurement

The department will measure Remove and Salvage Existing Hydrant as each individual unit, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.22	Remove and Salvage Existing Hydrant	Each

Payment is full compensation for removing and salvaging existing hydrants, including furnishing all backfill, restoration, labor, tools, equipment and incidentals necessary to complete this item of work.

58. Concrete Base Offset, Item SPV.0060.23.

A Description

This special provision describes construction of concrete street light bases, including necessary hardware, in accordance to the pertinent provisions of standard spec 654 and as hereinafter provided.

B Materials

Concrete masonry shall be Grade A, A-WR, A-FA, or A-IP conforming to the requirements of standard spec 501. Conduit cast within the bases shall be Schedule 40 polyvinyl chloride (PVC) electrical conduit and shall conform to the requirements of standard spec 652. Anchor bolts shall be made from high strength steel (50 KSI minimum yield strength), ASTM A36, and each shall be fitted with two hard washers and two heavy hex nuts. Each bolt shall have approximately 6 inches or more of thread at the top end. The bolts, washers, and nuts shall be galvanized. Bar steel reinforcement shall conform to the requirements of standard spec 505.

C Construction

Locate proposed street light bases as shown in the plans in accordance to the Construction Staking Electrical Systems bid item. Where Ongoing – Planned Submittal March 2015 potential underground conflicts exist, locate the existing utility. Hand excavation may be required. MG&E gas requires an inspector to be present when excavating near MG&E gas facilities in accordance to the Utilities Article of these special provisions. The engineer will determine whether to adjust the base location laterally to avoid the conflict or require the use of an Offset Base. Install rock shield between the main and street light base as directed by MG&E personnel. MG&E will supply the rock shield.

Forms shall be of sufficient depth to provide a minimum of 12 inches of formed base below the finished grade on the low side of the base. The top surface of the base shall be level with a $\frac{3}{4}$ inch bevel on the edges and shall be given a rubbed finish.

Anchor bolts shall be cast into the base as shown on the plans. Bolt circle diameters shall be verified before constructing the bases. Manufactured elbows shall be furnished and installed in all bases by the contractor, except as noted on the details. Elbows shall be installed to permit conduit to be installed in as nearly straight-line runs as possible, without unnecessary bends. Bases not installed to this standard will not be accepted.

Existing conduit shall be extended into the bases. Elbows shall conform to the requirements of the type of conduit entering the base. Each base at the end of a run shall have an extra elbow installed as directed by the engineer. Extra elbows shall also be installed in any base as directed by the engineer. Poles shall not be erected on the concrete bases until the bases have cured for at least seven days. All concrete bases shall require a rubbed finish down to finished grade.

D Measurement

The department will measure Offset Concrete Base by each individual unit, 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
SPV.0060.23	Concrete Base Offset	Each

Payment is full compensation for furnishing and installing all materials including conduit, bushings, caps and/or plugs, ground rod, anchor bolts, cadwelding, copper grounding wire; bar steel reinforcement, and concrete masonry; for providing openings through existing pavement where required; for excavation, including hand-digging as required, backfill, and disposal of surplus materials.

59. Electrical Pullbox Type I, Item SPV.0060.24; Electrical Pullbox Type III, Item SPV.0060.25; Electrical Pullbox Type V, Item SPV.0060.26.

A Description

This special provision describes furnishing and installing pull boxes and manholes in accordance to standard spec 653, the plan details, and as herein provided.

B Materials

Electrical Pullbox, Type I shall be gray colored polymer concrete construction. Box dimensions for Type I shall be 19" wide x 32" long x 24" deep and come with a cover rated to withstand 15,000 lbs. over a 10" square with a minimum test load of 22,568 lbs.

Electrical Pullbox, Type III shall be high density polyethylene box and concrete polymer lid or concrete polymer construction for box and lid. Box dimensions for Type III shall be 12" wide x 12" long x 12" deep. The Type III box and polymer cover shall be rated to withstand 20,000 lbs.

Electrical Pullbox, Type V, shall be gray colored polymer concrete construction. Box dimensions shall be 24" wide by 36" long by 24" deep. The box and cover shall be rated at 15,000 lbs. over a 10" square. Each cover shall have the logo "TRAFFIC SIGNAL" imprinted from the manufacturer.

C Construction

Install in accordance to the pertinent provisions of standard spec 653.3 and the plan details.

D Measurement

The department will measure Electrical Pullbox (Type) by each individual unit, 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
SPV.0060.24	Electrical Pullbox Type I	Each
SPV.0060.25	Electrical Pullbox Type III	Each
SPV.0060.26	Electrical Pullbox Type V	Each

Payment is full compensation for for furnishing and installing all materials, including crushed aggregate; for excavation, backfill, and disposal of surplus materials.

60. Concrete Base Type G, Item SPV.0060.27; Type LB-3, Item SPV.0060.28; Type LB-8, Item SPV.0060.29; Type P, Item SPV.0060.30.

A Description

This special provision describes construction of concrete foundations, including necessary hardware, as shown on the plans, in accordance to the pertinent provisions of standard spec 654 and as hereinafter provided.

B Materials

Concrete masonry shall be Grade A, A-WR, A-FA, or A-IP conforming to the requirements of standard spec 501.

Conduit cast within the bases shall be Schedule 40 polyvinyl chloride (PVC) electrical conduit and shall conform to the requirements of standard spec 652.

Anchor bolts for Type G bases shall be made from high-strength steel 50 KSI minimum yield strength, ASTM A36, and each shall be fitted with a hard washer and heavy hex nut. Each bolt shall have approximately 3 inches or more of thread at the top end. The bolts, washers, and nuts shall be galvanized. Bolts shall be $\frac{3}{4}$ " x 24".

Anchor bolts for Type LB-3 and Type LB-8 bases shall be made from high strength steel (50 KSI minimum yield strength), ASTM A36, and each shall be fitted with two hard washers and two heavy hex nuts. Each bolt shall have approximately 6 inches or more of thread at the top end. The bolts, washers, and nuts shall be galvanized. Bolts for the LB-8 base shall be 1.25 inch by 48 inch, including 4 inch L-bend at the bottom. Bolts for the LB-3 base shall be 1.00 inch by 40 inch including 4 inch L-bend at the bottom.

The Type P bases shall include a concrete maintenance platform. The Type P and bases shall generally be constructed in accordance to the Concrete Control Cabinet Base Standard Detail. The location of the conduits in the base shall be confirmed with the City of Madison. Anchor bolts, nuts, and washers for Concrete Controller Base, Type P, will be provided and installed by the City of Madison when installing signal control cabinets. Bar steel reinforcement shall conform to the requirements of standard spec 505.

C Construction

The bases shall be placed with one side parallel to the centerline of the street.

Forms shall be of sufficient depth to provide a minimum of 12 inches of formed base below the finished grade on the low side of the base. The top surface of the base shall be level with a $\frac{3}{4}$ inch bevel on the edges and shall be given a rubbed finish.

Anchor bolts shall be cast into the base as shown on the plans. Bolt circle diameters shall be verified before constructing the bases.

Manufactured elbows shall be furnished and installed in all bases by the contractor, except as noted on the details. Elbows shall be installed to permit conduit to be installed in as nearly straight-line runs as possible, without unnecessary bends. Bases not installed to this standard will not be accepted. Existing conduit shall be extended into the bases. Elbows shall conform to the requirements of the type of conduit entering the base. Each base at the end of a run shall have an extra elbow installed as directed by the engineer.

Extra elbows shall also be installed in any base as directed by the engineer.

Poles shall not be erected on the concrete bases until the bases have cured for at least seven days.

All concrete bases shall require a rubbed finish down to finished grade.

D Measurement

The department will measure Concrete Base (Type) by each individual unit, 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
SPV.0060.27	Concrete Base Type G	Each
SPV.0060.28	Concrete Base Type LB-3	Each
SPV.0060.29	Concrete Base Type LB-8	Each
SPV.0060.30	Concrete Base Type P	Each

Payment is full compensation for furnishing and installing all materials including conduit, bushings, caps and/or plugs, ground rod, anchor bolts, cadwelding, copper grounding wire; bar steel reinforcement, and concrete masonry; for providing openings through existing pavement where required; and for excavation, including hand-digging as required, backfill, and disposal of surplus materials.

61. Concrete Curb and Gutter, 24-Inch Special, City of Madison Type H, Item SPV.0090.01; Concrete Curb and Gutter, 30-Inch Special, City of Madison Type X, Item SPV.0090.02.

A Description

This special provision describes constructing concrete curb and gutter as detailed in the plan and in accordance to standard spec 601.

B Materials

Furnish materials in accordance to standard spec 601.2.

C Construction

Construct concrete curb and gutter as detailed in the plan and in accordance to standard spec 601.3.

D Measurement

The department will measure Concrete Curb and Gutter (Size) Special, City of Madison (Type) by the linear foot, acceptably completed, in accordance to standard spec 601.4.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.01	Concrete Curb and Gutter 24-Inch Special, City of Madison Type H	LF
SPV.0090.02	Concrete Curb and Gutter 30-Inch Special, City of Madison Type X	LF

Payment is full compensation for furnishing all foundation excavation and preparation; all special construction required at driveways and alley entrances or curb ramps; providing all materials, including concrete, expansion joints, and reinforcement tie bars unless specified otherwise; placing, finishing, protecting, and curing; sawing joints; disposing of surplus excavation material, and for restoring the work site. For tie bars provided in concrete not placed under the contract, the department will pay separately under the Drilled Tie Bars bid item as specified in standard spec 416.5.

62. Sanitary Sewer Pipe PVC, 8-Inch, Item SPV.0090.03.

A Description

This special provision describes installing Sanitary Sewer Pipe PVC, 8-Inch at the alignment and grades shown on the plan. All sections of the sewer mainline are required to pass a low pressure air test, mandrel test, and a visual inspection via televising as specified in Article 501.3(b) of the City of Madison Standard Specifications for Public Works Construction – 2014 Edition. Costs associated with the testing of the gravity main are included in the contract unit price bid for this item.

B Materials

Provide solid-wall Poly (Vinyl Chloride) (PVC) sanitary sewer pipe and fittings meeting the requirements for Poly (Vinyl Chloride) (PVC) Sewer Pipe and Fittings, ASTM D 3034.

Provide pipe and fittings having a standard dimension ratio of 35.

Assemble joints using an elastomeric or solvent cement as recommended by the pipe manufacturer.

The assembled joints will be required to pass the performance tests as required in ASTM D3212 elastomeric or ASTM D2564-solvent cement.

The pipe materials (ASTM D3034 SDR 35) will be the same pipe material type from sewer access structure to sewer access structure.

C Construction

Install the sanitary sewer pipe in accordance to all applicable provisions of the City of Madison Standard Specifications for Public Works Construction – 2014 Edition.

Remove all abandoned or existing material located in the new sanitary sewer alignment. Removal of material (including existing sanitary sewer/water main/etc) is incidental to this bid item.

Use manufactured wye fittings to install new laterals to the new main as called for on the plans; provide and place in accordance to standard spec 503 for Public Works Construction – 2014 Edition. Do not install saddle type wyes without prior approval from the City of Madison.

Complete testing and televising of new sewer lines in accordance to Article 501 of the City Standard Specifications for Public Works Construction - 2014 Edition.

D Measurement

The department will measure Sanitary Sewer Pipe PVC, 8-Inch in length by the linear foot, acceptably completed.

Sanitary Sewer Pipe PVC, 8-Inch will be measured through sanitary sewer structures, from the center of sanitary sewer casting to center of sanitary sewer casting. Sanitary Sewer Pipe PVC, 8-Inch not terminating at a sanitary sewer structure will be measured to the end of pipe. Deductions from the measure length will not be made for wye installations.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.03	Sanitary Sewer Pipe PVC, 8-Inch	LF

Payment is full compensation for furnishing all materials, necessary to perform the work; excavation of the trench, except tunneling and jacking; installation and removal of sheeting and bracing; removal of water from the trench; disposal of surplus material from the trench; backfilling the trench and compaction of the backfill material; embankment over the sewer using surplus material from the excavation of the trench; bedding the pipe; laying the pipe and installing the fittings and accessories; jointing and sealing of joints in pipe, fittings and accessories; encasement, where specified; connections to existing structures; cleaning out the sewer; restoring the site; and all other work incidental to the installation of sanitary sewers.

63. Sanitary Sewer Lateral, Item SPV.0090.04.

A Description

This work consists of excavating required trenches, connecting the lateral to the mainline pipe, placing bedding material, connecting the new lateral to the existing lateral, all required fittings, couplings, and bends, backfilling and compacting the trenches and restoring the work site as provided by the plans, specifications and contract. This work also consists of locating, identifying, and abandoning “inactive” laterals.

B Materials

Furnish sanitary sewer pipe and fittings that are solid-wall Poly Vinyl Chloride (PVC) and that conform to the requirements of the Specification for PVC Sewer Pipe and Fittings, ASTM D 3034.

Provide sanitary sewer pipe and fittings having a standard dimension ratio of 35.

Furnish elastomeric or solvent cement joints made as recommended by the manufacturer.

Provide compression coupling connections to the existing sewer laterals in conformance to Standard Detail Drawing 5.3.3, Coupling detail, from the City of Madison Standard Specifications for Public Works Construction- 2014 Edition.

C Construction

Install laterals in accordance to Article 503.3 of the City of Madison Standard Specifications for Public Works Construction – 2014 Edition.

The use of 45-degree bends is not permitted except with connecting to a wye at the sanitary sewer main. Bends of 22.5 degrees or less may be used, provided they are separated by at least two feet of straight pipe. Provide new lateral pipe having a minimum diameter of four inches that is also greater than or equal to the diameter of the adjoining lateral. Connecting a new lateral pipe to an existing lateral having a smaller diameter than the existing lateral is not permitted.

Per the City of Madison Standard Specifications for sanitary sewer lateral construction on street reconstruction projects, contractors are encouraged to begin installation of sanitary lateral pipe at the proposed sewer main. If contractor starts excavation for the lateral at the

property line, it will be at the contractor's risk. A portion of the sanitary sewer laterals were located and surveyed prior to design. Laterals located are marked on the plan as Lateral Located (TYP). If tree conflicts are encountered during the sanitary lateral replacement process, contractors are instructed to follow the new policy set in the Standard Specifications for Public Works Construction, 2014 edition. No Utility Line Openings (ULOs) will be granted for the inability to locate the sanitary lateral at the property line. Any extra sidewalk removal will not be compensated to the contractor looking for an existing sanitary lateral at the property line.

Contractors will be required to have a locator device on-site if they intend to start laying lateral pipe at the property line to minimize the amount of extra sidewalk removal. Each sanitary lateral will have a maximum of 4 sidewalk squares removed and replaced. No additional compensation will be awarded beyond this amount for the replacement of a sewer lateral. If laterals called for reinstatement on the plans are to be plugged under the direction of the engineer on-site, contractors are required to use a sonde device to confirm that the laterals that are called for abandonment are not active, Couple the junction of a new lateral pipe to an existing lateral pipe as required in the field by the City of Madison. Saw cut the existing main to accommodate a clean joint for the installation of the compression couplings. Place the coupling as directed by the City of Madison and per Standard Detail Drawing 5.3.3, Coupling Details, from the City of Madison Standard Specifications for Public Works Construction - 2014 Edition

D Measurement

The department will measure Sanitary Sewer Lateral, by the linear foot, acceptably completed.

The quantity to be paid will be measured from the connection of the mainline sewer pipe to the connection of the existing sanitary lateral along the centerline of the pipe.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.04	Sanitary Sewer Lateral	LF

Payment is full compensation for determining whether laterals are “active”, “inactive”, or abandoned, and the exact location and size of “active” lateral reconnections; all labor, tools, equipment and incidentals necessary to complete the work.

Connection of lateral to the proposed sewer main and the first 5 feet of lateral pipe associated with the connection is paid under bid item Sanitary Lateral Reconnect.

Select fill for sanitary sewer lateral is paid under bid item Select Fill for Sanitary Sewer. The quantity for this item may be increased or decreased beyond the limits set forth in Article 104 of the City of Madison Standard Specifications for Public Works Construction – 2014 Edition.

64. Select Fill for Sanitary Sewer, Item SPV.0090.05.

A Description

This special provision describes furnishing and placing select fill over the sanitary sewer main and laterals along the entire length of the pipe.

B Materials

Provide select fill meeting the requirements of Article 202.2(b) of the City of Madison Standard Specifications for Public Works Construction – 2014 Edition for select fill for sanitary sewer mains and laterals.

C Construction

Install select fill for sanitary sewer in accordance to all applicable provisions of Article 502.1(e) of the City of Madison Standard Specifications for Public Works Construction – 2014 Edition.

D Measurement

The department will measure Select Fill for Sanitary Sewer in length by the linear foot, acceptably completed. Measurement will be completed along the centerline of the installed sanitary sewer pipe and includes the length through Sewer Access Structures.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.05	Select Fill For Sanitary Sewer	LF

Payment is full compensation for furnishing all labor, tools, equipment, materials, and incidentals necessary to complete the contract work.

65. Remove Sanitary Sewer Pipe, Item SPV.0090.06.

A Description

This special provision describes removing sanitary sewer pipe within the right-of-way as called for on the plan set in accordance to Article 203 of the City of Madison Standard Specifications for Public Works Construction – 2014 Edition. “Pipe to be removed that is in the same trench as a new pipe will not be compensated as remove pipe and will be considered to be incidental to the new pipe installation.” The same trench will be considered to be any pipe located within 3’ horizontally of the pipe being installed. This includes unidentified pipe that is smaller than 10 inches in diameter. If the pipe to be removed ends along a pipe run, as opposed to ending at a structure, the contractor will end the removal with a saw cut of the existing pipe and plug the remaining end as directed by the engineer. Plugging the structure or pipe to which the pipe being removed was connected will be compensated for under a separate bid item (Abandon Sanitary Sewer - Pipe Plug, Item SPV.0060.09). If the contractor, for his convenience, decides to remove a section of pipe to a full section, the additional removal will not be given consideration for additional compensation.

B (Vacant)**C Construction**

Sawcut the pipe ends at the pipe removal limits if the pipe as a whole is not called for removal. Dispose all pipe removed. All trenches, holes and pits resulting from the removal or abandoning of pipe and other miscellaneous structures will be filled with satisfactory soil or select fill, placed in layers not more than 12 inches in thickness. Select backfill will be required for any structure or pipe within the roadway that will not be filled with another structure or pipe. All fill material required will be considered incidental to the removal or abandonment. Each layer will be thoroughly compacted by means of approved tampers, rollers or vibrators. Water will not be used to expedite settlement of backfill except with the approval of the engineer; this provision will not be construed to require an excavation to be dewatered before placing backfill, if backfilling can be performed in such manner as to displace the water or prevent its entrapment in the backfill

D Measurement

The department will measure Remove Sanitary Sewer Pipe by the linear foot, acceptably completed, measured along the centerline of the sanitary sewer pipe removed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.06	Remove Sanitary Sewer Pipe	LF

Payment is full compensation for furnishing all materials, labor, tools, equipment and incidentals necessary to complete this item of work. Payment will include the Select Fill material required to backfill the trench created by pipe being removed.

66. Utility Trench Patch Type III, Item SPV.0090.07.**A Description**

Construct work under this item to conform to the requirements of Article 502 and Standard Detail Drawing 5.2.4 of the City of Madison Standard Specifications for Public Works Construction – Latest Edition for Type III Utility Trench Patch.

B Material

Provide new crushed stone meeting the requirements of standard spec 305, Base Aggregate Dense, 1 1/4-Inch. Provide new asphaltic surface per standard spec 465.

C Construction

Install Utility Trench patch in accordance to all applicable provisions of Article 502 and SDD 5.2.4 of the City of Madison Standard Specifications for Public Works Construction – Latest Edition for Type III Patch.

D Measurement

The department will measure Utility Trench Patch Type III by the linear foot, acceptably completed, measured along the centerline of the patch.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.07	Utility Trench Patch Type III	LF

Payment is full compensation for furnishing all materials necessary to restore the pavement, but does not include the Select Fill material required to backfill the trench; and includes placing, consolidating and compacting the materials used to restore the pavement and all other work incidental the installation of utility trench patches.

67. Furnish and Install 6-Inch Pipe and Fittings, Item SPV.0090.08; Furnish and Install 8-Inch, Item SPV.0090.09; Furnish and Install 10-Inch, Item SPV.0090.10; Furnish and Install 12-Inch, Item SPV.0090.11.

A Description

Furnish, install and test new water main and fittings. Work for this item also includes:

1. Thrust restraints.
2. Temporary flushing devices (blow-offs and/or temporary hydrants).
3. Polyethylene encasement.
4. Temporarily raising or lowering existing water services.
5. Exposing existing water main to verify location and depth.
6. Concrete and asphalt pavement removal.
7. Restoring the site.

B Materials

Refer to Article 702 of the *City Standard Specifications* and this section.

All materials necessary to perform the work, including:

1. Pipe and accessories.
2. Fittings and accessories.
3. Sleeves, clamps, tie rods, plugs.
4. Thrust blocking and/or restrained-joint gaskets.
5. Polyethylene encasement.
6. Bedding material to cover the pipe.

C Construction

Refer to Article 703 the *City Standard Specifications* and this section.

Pipe Laying and Bedding:

1. Pipes with a minimum of 6-feet and a maximum of 7-feet of cover from final grade.
2. For line or grade adjustments of 24-inches or less, use offsets in lieu of bend fittings.
3. Inspect all pipe and fittings for damage and cleanliness prior to lowering into the trench. Any costs due to the repair of damaged valves and hydrants caused by sand or silt in the pipe will be assessed.
4. Never roll or push the pipe into the trench from the bank. Always lower the pipe into the trench using mechanical equipment.
5. Do not place chlorine in a pipe during installation that will not be filled and flushed within 45 days of installation.

Slip Joints:

1. A slip joint is made by compressing a rubber gasket between a bell cast in the end of one pipe and the plain end of the pipe to be joined.
2. Assemble in accordance to AWWA C600 - latest revision, including:
3. Thoroughly clean the groove and the bell socket of the pipe or fitting, and the plain end of the mating pipe.
4. Using a clean gasket of the proper design for the joint to be assembled, make a small loop in the gasket and insert it in the socket, making sure the gasket faces the correct direction and that it is properly seated.
5. Apply lubricant to the gasket and plain end of the pipe in accordance to ANSI/AWWA C111/A21.11 - latest revision. Only use lubricant supplied by the pipe manufacturer.
6. Be sure that the plain end of the pipe is beveled, as square or sharp edges may damage or dislodge the gasket and cause a leak.
7. Push the plain end into the bell of the pipe, keeping the joint straight while pushing.
8. Deflect the pipe as required only after the joint is assembled.
9. Connect the bonding straps after the pipe is in place to ensure conductivity across the joint.

D Measurement

The department will measure Furnish and Install (Inch) Pipe Fittings by length, in feet, to the nearest half foot for each size (diameter) of pipe installed, acceptably completed. Measured along the centerline of the pipe, from center to center of valves and fittings. No deductions from the measured lengths for fitting installations.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.08	Furnish and Install 6-Inch Pipe and Fittings	LF
SPV.0090.09	Furnish and Install 8-Inch Pipe and Fittings	LF
SPV.0090.10	Furnish and Install 10-Inch Pipe and Fittings	LF
SPV.0090.11	Furnish and Install 12-Inch Pipe and Fittings	LF

Payment is full compensation for furnishing and installing water main pipe and fittings, including trench excavation and preparation, all materials, labor, tools, equipment and incidentals necessary to complete this item of work.

Payment for temporary flushing hydrants and/or blow-offs will be considered only if subsequently required as a result of plan revisions issued by the engineer:

1. A payment of \$1,500.00 will be made for any authorized temporary flushing hydrant.
2. Any hydrant used for temporary flushing purposes may not become a permanent fixture anywhere in the system.
3. A payment of \$500.00 will be made for any 2-inch or larger blow-off device.
4. Temporary hydrants or blow-offs resulting from a plan revision must be reviewed by the engineer for payment considerations.

Additional Fittings, where authorized, are to be paid as follows:

DESCRIPTION	UNIT	PRICE
6-Inch Fitting	Each	\$705.00
8-Inch Fitting	Each	\$950.00
10-Inch Fitting	Each	\$1,075.00
12-Inch Fitting	Each	\$1,200.00

Total fitting quantity to be balanced out by any fittings identified on the plan set to be furnished and installed, but that were not furnished and installed.

Additional tee fittings:

1. Paid or credited as 1½ fittings.

Additional offset and cross fittings:

1. Paid or credited as 2 fittings.

68. Horizontal Directional Drill Water 12-Inch Pipe, Item SPV.0090.12.

A Description

Furnish, assemble, install and test horizontal directional-drilled water pipe and fittings.

Work for this item also includes:

1. Excavating boring pits and other trenches. Backfilling and compacting said excavations.
2. Exposing existing water mains to verify location and depth.
3. Installing tracer wire, joint adapters, bracing, plugs and other accessories.
4. Hard-rock drilling.
5. Disposing of surplus material.
6. Restoring the work area.

B Material

Refer to Article 702 of the *City Standard Specifications* and this section.

For this project, as a precautionary measure against potential contaminated soils and/or groundwater, Class 53 ductile iron restrained joint pipe (such as US Pipe TR-Flex, or equal), with fluorocarbon gaskets and double-layer polywrap is required along the entire horizontal directional drill installation segment.

C Construction

Refer to Article 703 of the *City Standard Specifications* and this section.

Prior to bidding, become familiar with anticipated subsurface and existing field conditions that will affect the location of the bore pits and the lengths and depths of the pipe installation, as well as any equipment, tools and materials required to keep the necessary installation within the limits identified on the drawings.

The contract documents represent the best information available with regard to anticipated field conditions; however, any provisions necessary for encountering hard-rock drilling are to be included and are considered incidental to the installation.

Exposing existing water mains to verify location is considered incidental to the installation.

Submit a horizontal directional-drilling plan, sequence of work, and drilling schedule to the engineer for review prior to commencing work. At a minimum, include:

1. Detailed site plan drawing which depicts location and size of boring pits and staging areas.
2. Proposed sequence and schedule of HDD operations.
3. Method of controlling and monitoring and recording the bore location, accuracy, and depth.
4. Drilling mud storage, handling and contingency plan.
5. Any other applicable details regarding how the work will progress and be controlled.

The engineer will review the precision of the installed pipe. For gross misalignment, the engineer reserves the right to require that the pipe be reinstalled at no cost to the city. Maintain liability for all costs associated with modifying to easements due to HDD installation alignment errors. Pipe installation accuracy requirements:

1. Horizontal accuracy of +/- 3-feet.
2. Vertical accuracy of plus 6-inches and minus 3-feet.

D Measurement

The department will measure Horizontal Directional Drill Water 12-Inch Pipe by length in feet, to the nearest half-foot for each size (diameter) of pipe installed, acceptably completed.

Measured along the centerline of the pipe at the surface along the design alignment from center-to-center of valves and fittings.

No deductions will be taken from the measured lengths for fitting installations. No additions to the length of the pipe will be given due to misalignment of the bore.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.12	Horizontal Directional Drill Water 12-Inch Pipe	LF

Payment is full compensation for furnishing and installing water main and tracer wire by horizontally directionally drilling methods, including utility locating, plan preparation, installation tracking, materials, labor, tools, equipment, restoration and incidentals necessary to complete this item of work.

69. Extend and Reconnect 1-Inch Service Lateral, Item SPV.0090.13; 1.5-Inch, Item SPV.0090.14; 2-Inch, Item SPV.0090.15.

A Description

Connect-to and extend existing water service laterals to the new water main. Restore any disturbed terrace areas, as necessary.

B Materials

Refer to Article 702 of *the City Standard Specifications*.

C Construction

Refer to Article 703 of *the City Standard Specifications*, the General Provisions of Water Main herein, and this section.

Excavate to expose the existing water main at the existing service connection.

Cut-off the service pipe at the exposed location.

Couple the disconnected end of the service with a new service of the designated size.

Extend the new copper lateral to the new water main and connect the new service tubing to the corporation stop on the new water main.

D Measurement

The department will measure Extend and Reconnect (Size) Service Lateral by length in feet along the centerline of the pipe at the surface, from the center of the water main to the point of the connection, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.13	Extend and Reconnect 1-Inch Service Lateral	LF
SPV.0090.14	Extend and Reconnect 1.5-Inch Service Lateral	LF
SPV.0090.15	Extend and Reconnect 2-Inch Service Lateral	LF

Payment is full compensation for disconnecting existing water service laterals, extending the existing laterals with new copper tubing and reconnecting the laterals to new water mains, including furnishing all materials, labor, tools, equipment and incidentals necessary to complete this item of work.

70. Select Fill for Water Main, Item SPV.0090.16.**A Description**

Install select imported fill from outside of the project, to be placed in the trenches as specified in the Contract Documents.

Excess excavated material resulting from this work is considered surplus material; dispose of at no additional cost to the department or the city.

B Materials

Refer to Article 702 of the *City Standard Specifications* and this section.

Under no circumstances will asphalt material of any size or foreign debris be allowed in the backfill material.

C Construction

Refer to Article 703 of the *City Standard Specifications*.

D Measurement

The department will measure Select Fill for Water Main by length in feet along the centerline of the pipe at the surface for new installations, to the nearest foot, acceptably completed.

When excavating for maintenance or abandonment items:

Measured along the centerline of the trench.

The engineer may require truck delivery tickets to substantiate compensation.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.16	Select Fill for Water Main	LF

Payment is full compensation for furnishing and installing select fill in water main and water lateral installation trenches, including all materials, labor, tools, equipment and incidentals necessary to complete this item of work.

71. Furnish and Install 2-Inch Foam Board Insulation, Item SPV.0090.17.

A Description

Install foam board insulation to insulate water mains and/or water service laterals.

Foam board insulation is required when:

1. The top of water main has 5-feet of cover or less.
2. The water main crosses below storm sewer.
3. When otherwise specified on the drawings or as directed by the engineer.

B Materials

Refer to Article 702 of the *City Standard Specifications* and this section.

Foam Board requirements:

1. Thickness: 2-inch (minimum).
2. Minimum strength: 25 psi.
3. High-density polystyrene board.
4. 4-foot by 8-foot sheets.

C Construction

Refer to Article 703 of the *City Standard Specifications* and this section.

After pipe installation, backfill and compact the trench to a level 6-inches above the top of pipe. Place insulation board in the trench centered over the pipe on a level surface in order to provide proper support for the insulation.

Following installation of the foam board, backfill and compact the remainder of the trench.

D Measurement

The department will measure Furnish and Install 2-Inch Foam Board Insulation measured along the centerline of the pipe at the surface, by length in feet of pipe effectively insulated and 4 feet wide, acceptably completed.

E Payment

Paid at the contract unit price under the following bid items:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.17	Furnish and Install 2-Inch Foam Board Insulation	LF

Payment is full compensation for furnishing and installing 2-inch foam insulation board, including all materials, labor, tools, equipment and incidentals necessary to complete this item of work.

72. Removing Steel Sheet Piling, Item SPV.0105.01.

A Description

This special provision describes removing and disposing of the existing steel sheet piling on the southwest and southeast stream banks at the existing Milwaukee Street bridge over the East Branch of Starkweather Creek as shown on the plans and as hereinafter provided.

B (Vacant)

C Construction

Remove the steel sheet piling, tie rods and anchorage system in its entirety. Excavate as necessary to prevent soils from entering the stream. Copies of the original 1992 plans for the steel sheet pile walls are available from the City of Madison. Contact Steve Sonntag, P.E. at (608) 267-1997 for a copy of the plans.

The length of steel sheet piling walls along the stream banks are approximately 80 linear feet in the southwest quadrant and 30 linear feet in the southeast quadrant. Based on the original plans the height of the steel sheet piling is estimated to be between 10 feet and 12 feet including approximately 6 feet below the streambed.

Dispose of the steel sheet piling in accordance to the pertinent sections of the standard specifications.

D Measurement

The department will measure Removing Steel Sheet Piling 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 item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.01	Removing Steel Sheet Piling	LS

Payment is full compensation for excavating and removing existing steel sheet piling; and for disposing of steel sheet piling.

73. Wastewater Control 150 GPM, Item SPV.0105.02.

A Description

Work under this item includes controlling or diverting, to the city of Madison's satisfaction, sanitary sewer flows during reconstruction of the sanitary sewer. There is a Lift Station Force Main connected to the City Sewer on the eastern project limits that will need to be accounted for.

B (Vacant)

C Construction

Provide a pump with a capacity of 150 gallons per minute and all associated equipment required to maintain a functioning sanitary sewer system during construction. It is not acceptable, at any time, to disrupt normal flow of wastewater in sanitary sewer service laterals without prior approval from the City of Madison. This condition also holds at the time of connection of an existing lateral to the new sewer main.

If the contractor elects to use bypass pumping as a means of wastewater control, the methods, equipment, type of hose, etc. are subject to approval by the City of Madison engineer. Ramp any hoses crossing streets, driveways, parking areas, etc., to prevent damage to hoses. Contain spillage of wastewater to be within the utility trench and dispose of spillage into existing sewer downstream to previously installed sewer piping. Spillage of wastewater to adjacent streets, lawns, etc. will not be tolerated. Should spillage occur, cease all construction operations immediately and begin cleanup operations. Clean site thoroughly to the satisfaction of the engineer prior to the resumption of any construction operations.

D Measurement

The department will measure Wastewater Control 150 GPM as completed in accordance to the contract, and accepted, as a single complete lump sum unit of work.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.02	Wastewater Control 150 GPM	LS

Payment is full compensation for furnishing all labor, tools, equipment and other incidentals to complete the contract work.

74. Construction Staking Sanitary Sewer, Item SPV.0105.03.

A Description

Perform work in accordance to the applicable provisions of standard spec 650.

B (Vacant)

C Construction

Set and maintain construction stakes or marks as necessary to achieve the required accuracy and to support the method of operations. Set and maintain a minimum of two construction stakes to establish location and grade of sanitary sewer structures in accordance to the plans and details for sanitary sewer structures. Set and maintain construction stakes to establish location and grade of sanitary sewer main. Provide stakes that establish the horizontal and grade elevation of sanitary main at intervals of 25 feet

for a minimum of 100 feet from each structure and at intervals of 50 feet thereafter. Determine offsets in conjunction with contractor requirements. Verify the invert elevations of existing structures which are to remain and be connected into. Locate all stakes included in this bid item to within 0.02 feet horizontally and establish the grade elevation to within 0.01 feet vertically.

Place additional intermittent stakes as necessary to provide staking information at critical areas such as utility, driveway, roadway, and structure crossings.

D Measurement

The department will measure Construction Staking Sanitary Sewer completed in accordance to the contract, and accepted, as a single complete lump sum unit of work.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.03	Construction Staking for Sanitary Sewer	LS

Payment is full compensation for locating and setting all construction stakes; and for relocating and resetting damaged or missing construction stakes.

75. Construction Staking Water Main, Item SPV.0105.04.

A Description

Perform the work in accordance to the applicable provisions of standard specs 650.3.2 and 650.3.6.

B (Vacant)

C (Vacant)

D Measurement

The department will measure Construction Staking Water Main as a 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 item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.04	Construction Staking Water Main	LS

Payment for Construction Staking Water Main bid item is full compensation for locating and setting all construction stakes; for relocating and resetting damaged or missing construction stakes.

76. Project Dewatering, Item SPV.0105.05.

A Description

This section describes dewatering the site during construction or working with the water on-site in a manner that allows the project to be constructed in accordance to the plans and specifications. This item includes removal of any water entering a trench or excavation including but not limited to groundwater, surface water runoff and/or trench dewatering, both clean and potentially contaminated.

Groundwater is expected to be encountered during excavation for the sanitary sewer, water main, existing bridge removal, pile driving, sheet steel removal, construction of storm sewer, and placement of riprap and cut stone boulders. Provide and maintain ample means and devices with which to promptly remove all water entering excavations, trenches, and other parts of the work and keep said excavations dry until the structures to be built therein are completed.

Installation of concrete or masonry structures will not be acceptable if placed in water or if water is allowed to rise over masonry or concrete and there is danger of flotation or of setting up unequal pressures in the concrete until the concrete has set at least 24 hours and any danger of flotation has been removed.

The contractor is responsible for all work, materials and equipment required to comply with permit conditions to dewater the site. At a minimum, pump water into a settling tank, or alternate method approved by the engineer, to settle solids prior to discharge into the storm sewer for clean water and into the designated sanitary sewer for potentially contaminated water.

Potentially contaminated zones of groundwater are marked on the construction plan set. Conform with the requirements of Section 205 of the Standard Specifications, pertinent parts of the Wisconsin Administrative Code (Department of Natural Resources Environmental Investigation and Remediation of Environmental Contamination, Chapters NR 700-736), as shown on the construction plan set, and as supplemented herein. Comply with all permit requirements and applicable regulations, and monitor the discharge volume of potentially contaminated water generated as necessary to meet the permit requirements. This bid item is intended for all sub-surface utility work for which dewatering may be necessary including sanitary sewer, water main, storm sewer, electrical and traffic signal construction.

Discharge potentially contaminated water from the zones as indicated on the construction plan set or as directed by the engineer to the sanitary sewer. For the purposes of this project suspended solids shall not be considered a type of contamination. Do not discharge contaminated groundwater without prior approval from the Environmental Consultant.

Obtain a *City of Madison Permit to Discharge to the Sanitary Sewer* compliant with all local ordinances and state statutes. The permit will require that the contractor monitor the volume of total water discharged into the sanitary sewer and will determine the necessary reporting frequency. The contact for obtaining this permit is:

Tim Troester
City of Madison engineering
Telephone: (608) 267-1995
Email: ttroester@cityofmadison.com

The city's environmental consultant will be responsible for obtaining the necessary approvals from the Madison Metropolitan Sewerage District (MMSD) for disposal of potentially contaminated groundwater. This approval will be issued at the same time as the *Permit to Discharge to the Sanitary Sewer*. Submit a dewatering plan to the City of Madison for approval with the application for *Permit to Discharge to the Sanitary Sewer*.

The contact for the city's environmental consultant is:

Brynn Bemis
City of Madison engineering
Telephone: (608) 267-1986
Email: bbemis@cityofmadison.com

B General

Discharge clean water once solids have been settled out (of any type or from any source) to the storm sewer system. For the purposes of this project suspended solids will not be considered a type of contamination.

Provide all equipment and personnel necessary to conduct dewatering operations as required for the proper completion of the work. Prepare a dewatering plan and submit it to the engineer for review and approval prior to starting dewatering operations. The plan shall include a description of the proposed dewatering methods and maps or drawings indicating the location of the dewatering facilities and points of surface discharge of the water.

The contractor is solely responsible for choosing a method of water control that is compatible with the constraints defined. The contractor is responsible for the adequacy of the water control system and will take all necessary measures to ensure that the water control operation will not endanger or damage any existing adjacent utility or structure.

Design, install and operate the method or methods of water control in such a manner as to provide satisfactory working conditions and to maintain the progress of work. Design the methods and systems so as to avoid settlement or damage to adjacent property in accordance to the applicable legislative statutes and judicial decisions of the State of Wisconsin. All required pumping, drainage and disposal of water will be done without damage to adjacent property or structures, or to the operations of other contractors and without interference with the access rights of public or private parties.

Review and approval of the dewatering plan does not relieve the contractor of the dewatering requirements stated in these specifications. The engineer assumes no liability for the performance or safety of the dewatering system.

Comply with all local ordinances and state statutes for the disposal of water from dewatering operations. Further, it is the contractor's responsibility to contact the Wisconsin Department of Natural Resources Private Water Supply Section prior to construction for dewatering discharge requirements and permits and to comply with all conditions of the Department of Natural Resources. In accordance with Paragraph 144.025(2)(e), Wisconsin Statutes, permits are required for all groundwater control wells that singly or in aggregate produce 70 or more gallons per minute. All wells shall be drilled and sealed in accordance to requirements of the WDNR for installing and abandoning wells. The contact for obtaining well permits is:

Wisconsin Department of Natural Resources
Private Water Supply Section
Box 7921
Madison, Wisconsin 53707
Telephone: (608) 261-6421
Email: <http://dnr.wi.gov/topic/Wells/dewatering.html>

File a copy of the permit with the owner 48 hours prior to commencement of any dewatering.

C Construction

Supplement standard spec 205.3 with the following:

Water shall not be allowed in trenches while pipe is being laid.

No masonry shall be installed in water nor shall water be allowed to rise over masonry or concrete if there is danger of flotation or of setting up unequal pressures in the concrete until the concrete has set at least 24 hours and any danger of flotation has been removed. Dewater in such a manner that assures safe working conditions and provides stable trench side slopes and trench bottom for adequate support of the pipe and appurtenances.

Dewater sufficiently to minimize or eliminate groundwater pressures below the proposed trench bottom which otherwise may tend to cause boiling or a "quick" condition at the trench bottom. Where silty sands or other impervious soils are encountered at and/or below the pipe zone, the dewatering equipment must be adequate to relieve the groundwater pressure below the impervious soil layer and accomplish sufficient drainage of the impervious soils to provide a stable trench bottom.

Pump water from the dewatering operations directly to a minimum 1,500 gallon holding tank, or alternate method approved by the engineer, to allow for settlement of large solids. Periodically pump clean water from the top of the settling tank into the storm sewer

system. Periodically pump potentially contaminated water from the top of the settling tank into the approved sanitary sewer. Provide a meter to measure the volume of potentially contaminated water discharged to the sanitary sewer system.

If free phase petroleum product, such as gasoline floating on the water, is observed during dewatering activities, terminate dewatering activities and notify the engineer and the Environmental Consultant.

Notify the engineer at least three days in advance of any proposed changes to the dewatering plan.

Any flooding or erosion damage caused by dewatering operations is the responsibility of the contractor. If flooding or erosion damage occurs, take immediate steps to eliminate those conditions and to correct any damage. The control of all surface and subsurface water, ice, and snow are considered part of the dewatering. Erosion control shall be exercised at all times, including the placement of silt fences, sedimentation basins and any other devices necessary for proper control.

Dispose of all water removed so as not to endanger public health, private and public property or completed work. Use only electrically driven pumps for dewatering operations. Comply with local requirements for noise control for all equipment utilized as part of the dewatering system (Madison General Ordinance 24.08). Provide sufficient mufflers or other noise reduction devices necessary to minimize the noise of the equipment. If ordered by the engineer, reduce noise to an acceptable level (as determined by the engineer) or supply an alternate system capable of meeting the noise requirements. This applies to any equipment utilized as part of the dewatering system.

Provide stand-by equipment to maintain continuous dewatering in the event of mechanical breakdown to part of the system.

The contractor is responsible for removal and/or abandonment of dewatering wells. Removal and/or abandonment shall conform to all state and local regulations.

D Measurement

The department will measure Project Dewatering as a single complete lump sum unit of work, completed in accordance to the contract and accepted.

Measure dewatering of potentially contaminated water and provide this information to the engineer at the frequency determined by the *Permit to Discharge to the Sanitary Sewer*. This information will not be used as a basis of payment.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.05	Project Dewatering	LS

Payment is considered full compensation for furnishing all work necessary for pumping, measuring, settling and discharging water, both clean and potentially contaminated; for paying permit fees required; for eliminating and correcting all flooding or erosion damage caused by dewatering operations.

The City of Madison will pay for any volume charges or disposal fees required by the City of Madison Sanitary Sewer Utility or Madison Metropolitan Sewerage District for the discharge of water into the sanitary sewer system.

77. Cut-Stone Boulders, Item SPV.0165.01.

A Description

This special provision describes work consisting of furnishing and placing cut-stone boulders in accordance to the requirements of the plans and these specifications.

B Materials

Provide stone for cut-stone boulders of durable quarry limestone of approved quality that are sound, hard, dense, resistant to the action of air and water, and free from seams, cracks or other structural defects.

Provide stone pieces for cut-stone boulders that are rectangular in shape and approved by the engineer with dimensions as shown on the plans.

C Construction

Properly trim and shape the bed for the cut-stone boulders in a stair-step configuration as shown on the plans.

Place cut-stone boulders by any mechanical means that will produce a completed job within reasonable tolerances of the typical section shown on the plans. Firmly set each cut stone boulder with no rocking or tipping providing a firm foundation for subsequent layers. Unless otherwise provided on the plans, provide cut-stone boulders not less than 8 inches thick. Limit hand work to the amount necessary to fill large voids or to correct segregated areas. Conform to the requirements of standard spec 645.3.7 for the placement of cut-stone boulders over geotextile fabric Type HR. Do not place cut-stone boulders against or in contact with any concrete masonry surface prior to the expiration of the curing and protection period for the concrete.

D Measurement

The department will measure Cut-Stone Boulders by the square foot in place of the completed work, and the quantity thereof to be paid for will be the summation of the square foot projections onto a vertical plane of the surface areas of such cut-stone boulders incorporated in the work in accordance to the contract. Only accepted work will be measured for payment and the computation of the quantity thereof will be based on the area within the limiting dimensions designated on the plans, in the contract or established by the engineer.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0165.01	Cut-Stone Boulders	SF

Payment is full compensation for excavation and preparation of the bed, including backfilling and disposal of surplus material; for furnishing and placing cut-stone boulders; and for restoring the site of the work.

78. Concrete Speed Hump, Item SPV.0180.01.**A Description**

The work under this item shall consist of manually forming and pouring concrete speed humps in accordance as detailed in the plans. All dowel bars shall be epoxy coated and in accordance to the standard specifications. All concrete curb and gutter adjacent to the speed hump shall be paid for separately under that associated bid item. Positive drainage shall be maintained in the flowline of all curb and gutter adjacent to the speed humps. Dowelling of curb and gutter for speed hump installation shall be considered incidental to Concrete Speed Hump.

B (Vacant)**C Construction**

Concrete Speed Hump shall be constructed at the location and to the dimensions as shown in the plans. The speed humps shall be poured in sections in order to maintain traffic flow. The concrete speed humps shall comply with all applicable sections of standard spec 415, pertaining to Non-Reinforced Concrete Pavement, Doweled. Concrete Speed humps shall be doweled with epoxy coated dowels as shown on the detail drawing. It is anticipated that the speed humps will be hand formed and no additional compensation shall be given for any labor required to form the speed humps to the dimensions shown on the details.

D Measurement

The department will measure Concrete Speed Hump by the square yard, 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
SPV.0180.01	Concrete Speed Hump	SY

Payment is full compensation for square yard of speed hump installed and for furnishing all labor, tools, materials, reinforcing, equipment, and incidentals necessary to complete the work.

79. Select Crushed Material for Travel Corridor Interstitial Space, Item SPV.0195.01.

A Description

Place select crushed material to fill voids and create a wildlife travel corridor, as shown in the plans and as hereinafter provided.

B Materials

Furnish select crushed material of limestone origin with approximately 1 inch – 3 inch fractured-face stone that is in accordance to the pertinent requirements of standard spec 312. Material shall be clean and substantially free from material passing the No. 4 (4.75mm) sieve.

C Construction

After placement of Riprap Heavy according to standard spec 606.3, fill the interstitial spaces between the rock with 1-inch to 3-inch fractured-face stone to prevent small wildlife from falling in between or being caught between the larger rocks, per WisDNR requirement. Install the crushed material to the limits shown on the plans.

D Measurement

The department will measure Select Crushed Material for Travel Corridor Interstitial Space by the ton, 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
SPV.0195.01	Select Crushed Material For Travel Corridor Interstitial Space	Ton

Payment is full compensation for providing, placing, and shaping the material.

80. Sediment Excavation, Item SPV.0195.02.

A Description

This work consists of excavation of East Branch Starkweather Creek sediments at the locations and to the limits shown on the plans, and loading, transporting and disposing of resulting materials at a DNR approved facility.

Pre-approval for this material has been received at the following landfill:

Waste Management Orchard Ridge Landfill
N96W13503 County Line Road
Menomonee Falls, WI 53051
(262) 253-8620

Complete work in accordance with the requirements of standard spec 205, pertinent parts of the Wisconsin Administrative Code (Department of Natural Resources Environmental Investigation and Remediation of Environmental Contamination, Chapter NR 700-736), as shown on the plans, and as supplemented herein.

Per NR 718.07 a solid waste collection and transportation service operating license is required under NR 502.06 whenever excavated contaminated materials are transported.

B Materials

Do not use equipment, facilities, or methods, which might damage adjacent construction or structures.

Excavate the East Branch Starkweather Creek streambed to the depth shown and limits upstream and downstream of the bridge as indicated on the plans.

Equip trucks used for hauling excavated sediment with watertight seals. Equip truck bed gates with locking mechanisms to prevent accidental discharge of excavated sediment.

C Disposing of Materials

Dewater dredged material prior to hauling for disposal. Dewatering from sediment excavation only may be discharged back into the Starkweather Creek.

Dispose of all sediment materials resulting from the sediment removal at a DNR approved facility. Laboratory testing results for the sediment can be found at <http://msa.filetransfers.net/downloadFilePublic.php?filePassId=c4966ac754eb106e69ca100fadc35fdb>. Profiling for the two Waste Management facilities listed has been completed.

D Coordination

Transport all sediment materials removed from the East Branch Starkweather Creek excavation to and dispose of in the nearest DNR approved facility. Notify the City of Madison engineering three days in advance of site excavation or disposal of sediment in the DNR approved facility. Contact person at City of Madison engineering is Brynn Bemis at (608) 267-1986).

E Health and Safety Requirements

Supplement standard spec 107 with the following.

Sediment impacted with volatile organic compounds, heavy metals, or other compounds may be encountered during excavation activities. Prepare a site specific Health and Safety Plan complying with the Occupational Safety and Health Administration (OSHA) standard for Hazardous Waste Operation and Emergency Response (HAZWOPER), 29 CFR 1910.120.

It is required that all site workers taking part in remediation activities or who will have the reasonable probability of exposure of safety or health hazards associated with the hazardous material complete Health and Safety training that meets OSHA requirements.

Submit a site specific Health and Safety Plan, and written verification that workers will have completed up to date OSHA training to the engineer prior to the start of remediation work.

Development, delineation and enforcement of the health and safety exclusion zones for each contaminated site location pursuant to 29 CFR 1910.120 is the responsibility of the contractor.

F Measurement

The department will measure Sediment Excavation by the ton, acceptably completed.

G Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0195.02	Sediment Excavation	TON

Payment is full compensation for excavating, loading, transporting, and disposing of all excavated materials as set forth above.

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:

450.3.2.1 General

Replace the entire text with the following effective with the January 2015 letting:

- (1) Do not place asphaltic mixture when the air temperature approximately 3 feet above grade, in shade, and away from artificial heat sources is less than 36 F for upper layers or 32 F for lower layers unless the engineer allows in writing. The contractor should place HMA pavement for projects on or north of STH 29 between May 1 and October 15 inclusive and for projects south of STH 29 between April 15 and November 1 inclusive. Notify the engineer at least one business day before paving.
 - (2) Unless the contract specifies otherwise, conform to the following:
 - Keep the road open to all traffic during construction.
 - Prepare the existing foundation for treatment as specified in 211.
 - Incorporate loose roadbed aggregate as a part of preparing the foundation, in shoulder construction, or dispose of as the engineer approves.
 - (3) Place asphaltic mixture only on a prepared, firm, and compacted base, foundation layer, or existing pavement substantially surface-dry and free of loose and foreign material. Do not place over frozen subgrade or base, or where the roadbed is unstable.
-

450.5 Payment

Replace the entire text with the following effective with the May 2015 letting:

- (1) All costs of furnishing, maintaining, and operating the truck scale or other weighing equipment and furnishing the weigh tickets are incidental to the contract.
 - (2) Nonconforming material allowed to remain in place is subject to price adjustment under 105.3.2.
 - (3) Full-depth sawing to remove integrally placed safety edge where not required is incidental to the contract.
 - (4) The contractor is responsible for the quality of HMA pavement placed in cold weather. If because of an excusable compensable delay under 108.10.3, the engineer directs the contractor to pave when the temperature is less than 36 F for the upper layer or less than 32 F for lower layers, the department:
 - Will relieve the contractor of responsibility for damage and defects the engineer attributes to cold weather paving.
 - Will not assess disincentives for density or ride.
-

455.3.2.1 General

Replace the paragraphs one and two with the following effective with the January 2015 letting:

- (1) Apply tack coat only when the air temperature is 32 F or more unless the engineer approves otherwise in writing. Before applying tack coat ensure that the surface is dry and reasonably free of loose dirt, dust, or other foreign matter. Do not apply if weather or surface conditions are unfavorable or before impending rains.
- (2) Use tack material of the type and grade the contract specifies. The contractor may, with the engineer's approval, dilute tack material as allowed under 455.2.4. Provide calculations using the asphalt content as-received from the supplier and subsequent contractor dilutions to show that as-placed material has 50 percent or more residual asphalt content. Apply at 0.050 to 0.070 gallons per square yard, after dilution, unless the contract designates otherwise. The engineer may adjust the application rate based on surface conditions. Limit application each day to the area the contractor expects to pave during that day.

460.2.2.3 Aggregate Gradation Master Range

Replace paragraph one with the following effective with the December 2014 letting:

- (1) Ensure that the aggregate blend, including recycled material and mineral filler, conforms to the gradation requirements in table 460-1. The values listed are design limits; production values may exceed those limits.

TABLE 460-1 AGGREGATE GRADATION MASTER RANGE AND VMA REQUIREMENTS

SIEVE	PERCENTS PASSING DESIGNATED SIEVES						
	NOMINAL SIZE						
	37.5 mm	25.0 mm	19.0 mm	12.5 mm	9.5 mm	SMA 12.5 mm	SMA 9.5 mm
50.0-mm	100						
37.5-mm	90 – 100	100					
25.0-mm	90 max	90 - 100	100				
19.0-mm	—	90 max	90 - 100	100		100	
12.5-mm	—	—	90 max	90 - 100	100	90 - 97	100
9.5-mm	—	—	—	90 max	90 - 100	58 - 72	90 - 100
4.75-mm	—	—	—	—	90 max	25 - 35	35 - 45
2.36-mm	15 – 41	19 - 45	23 - 49	28 - 58	20 - 65	15 - 25	18 - 28
75-µm	0 – 6.0	1.0 - 7.0	2.0 - 8.0	2.0 - 10.0	2.0 - 10.0	8.0 - 12.0	10.0 - 14.0
% MINIMUM VMA	11.0	12.0	13.0	14.0 ^[1]	15.0 ^[2]	16.0	17.0

^[1] 14.5 for E-0.3 and E-3 mixes.

^[2] 15.5 for E-0.3 and E-3 mixes.

460.3.4 Cold Weather Paving

Add a new subsection as follows effective with the May 2015 letting:

460.3.4 Cold Weather Paving**460.3.4.1 Cold Weather Paving Plan**

- (1) Submit a written cold weather paving plan to the engineer at the preconstruction meeting. In that plan outline material, operational, and equipment changes for paving when the air temperature approximately 3 feet above grade, in shade, and away from artificial heat sources is less than 40 F. Include the following:
- Use a department-accepted HMA mix design that incorporates a warm mix additive from the department's approved products list. Do not use a foaming process that introduces water into the mix.
 - Use additional rollers.

- (2) Engineer written acceptance is required for the cold weather paving plan. Engineer acceptance of the plan does not relieve the contractor of responsibility for pavement performance except as specified in 450.5(4).

460.3.4.2 Cold Weather Paving Operations

- (1) Do not place asphaltic mixture when the air temperature approximately 3 feet above grade, in shade, and away from artificial heat sources is less than 40 F unless a valid engineer-accepted cold weather paving plan is in effect.
- (2) If the national weather service forecast for the construction area predicts ambient air temperature less than 40 F at the projected time of paving within the next 24 hours, confirm or submit revisions to a previously engineer-accepted cold weather paving plan for engineer validation. Upon validation of the plan, the engineer will allow paving for the next day. Once in effect, pave conforming to the engineer-accepted cold weather paving plan for the balance of that work day or shift regardless of the temperature at the time of paving.

460.4 Measurement

Add paragraph two as follows effective with the January 2015 letting:

- (2) The department will measure HMA Cold Weather Paving by the ton of HMA mixture for pavement placed conforming to an engineer-accepted cold weather paving plan.

460.5.1 General

Revise paragraph one as follows effective with the January 2015 letting:

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

<u>ITEM NUMBER</u>	<u>DESCRIPTION</u>	<u>UNIT</u>
460.1100	HMA Pavement Type E-0.3	TON
460.1101	HMA Pavement Type E-1	TON
460.1103	HMA Pavement Type E-3	TON
460.1110	HMA Pavement Type E-10	TON
460.1130	HMA Pavement Type E-30	TON
460.1132	HMA Pavement Type E-30X	TON
460.1700	HMA Pavement Type SMA	TON
460.2000	Incentive Density HMA Pavement	DOL
460.4000	HMA Cold Weather Paving	TON

460.5.2.2 Disincentive for HMA Pavement Density

Revise paragraph two as follows effective with the January 2015 letting:

- (2) The department will not assess density disincentives for pavement placed in cold weather because of a department-caused delay as specified in 450.5(4).

460.5.2.4 Cold Weather Paving

Add a new subsection as follows effective with the May 2015 letting:

460.5.2.4 Cold Weather Paving

- (1) Payment for HMA Cold Weather Paving is full compensation for additional materials and equipment specified for cold weather paving under 460.3.4 including costs for preparing, administering, and following the contractor's cold weather paving plan. The department will not pay for HMA Cold Weather Paving for HMA placed on days when the department is assessing liquidated damages.
- (2) If HMA pavement is placed under 460.3.4 and the HMA Cold Weather Paving bid item is not in the contract, the department will pay for the additional costs specified in 460.5.2.4(1) as extra work. The department will pay separately for HMA pavement under the appropriate HMA Pavement bid items.

465.2 Materials

Replace paragraph two with the following effective with the December 2014 letting:

- (2) Under the other 465 bid items, the contractor need not submit a mix design. Furnish aggregates mixed with a type AC asphaltic material, except under the Asphaltic Curb bid item furnish PG58-28 asphaltic material. Use coarse and fine mineral aggregates uniformly coated and mixed with the asphaltic material in an engineer-approved mixing plant. The contractor may include reclaimed asphaltic pavement materials in the mixture.

506.3.2 Shop Drawings

Replace the entire text with the following effective with the May 2015 letting:

- (1) Ensure that shop drawings conform to the contract plans and provide additional details, dimensions, computations, and other information necessary for completely fabricating and erecting the work. Include project and structure numbers on each shop drawing sheet.
- (2) Check shop drawings and submit electronically to the department for review before beginning fabrication. For primary fabrication items, also certify that shop drawings conform to quality control standards by submitting department form DT2333. Department review does not relieve the contractor from responsibility for errors or omissions on shop drawings.
- (3) Shop drawings are part of the contract. The department must approve differences between shop drawings and contract plans. The contractor bears the costs of department-approved substitutions. Do not deviate from or revise drawings without notifying the department and resubmitting revised drawings.
- (4) Ensure that the fabricator delivers 3 sets of shop drawings for railroad structures to the railroad company upon contract completion.

Bid Items Added

Add the following new bid item effective with the January 2015 letting:

<u>ITEM NUMBER</u>	<u>DESCRIPTION</u>	<u>UNIT</u>
460.4000	HMA Cold Weather Paving	TON

Errata

Make the following corrections to the standard specifications:

501.3.2.4.4 Water Reducer

Correct errata by deleting the reference to footnote 6 for grade D concrete.

- (1) Add a water reducing admixture conforming to 501.2.3. Determine the specific type and rate of use based on the atmospheric conditions, the desired properties of the finished concrete and the manufacturer's recommended rate of use. The actual rate of use shall at least equal the manufacturer's recommended rate, and both the type and rate used require the engineer's approval before use.
-

506.5 Payment

Correct errata by changing the reference to 506.3.22.

- (9) The department will limit costs for inspections conducted under 506.3.22 to \$0.05 per pound of material and deduct costs in excess of that amount from payment due the contractor. The department will determine costs for in-house inspections based on hourly rates for department staff plus overhead and use invoiced costs for contracted-out inspections. The department will administer deductions for the contractor's share of the total inspection cost under the Excess Costs For Fabrication Shop Inspection administrative item.

ADDITIONAL SPECIAL PROVISION 7

- A. Reporting 1st 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.

ADDITIONAL SPECIAL PROVISION 9
Electronic Certified Payroll Submittal

(1) Use the department's Civil Rights Compliance System (CRCS) to submit certified payrolls electronically. Details are available online through the department's highway construction contractor information (HCCI) site on the Labor, Wages, and EEO Information page at:

<http://www.dot.wi.gov/business/civilrights/laborwages/index.htm>

(2) Ensure that all tiers of subcontractors, as well as all trucking firms, submit their weekly certified payrolls electronically through CRCS. These payrolls are due within seven calendar days following the close of the payroll period. Every firm providing physical labor towards completing the project is a subcontractor under this special provision.

(3) Upon receipt of contract execution, promptly make all affected firms aware of the requirements under this special provision and arrange for them to receive CRCS training as they are about to begin payrolls. The department will provide training either in a classroom setting at one of our regional offices or by telephone. Contact Tess Mulrooney at 608-267-4489 to schedule the training.

(4) The department will reject all paper submittals of forms DT-1816 and DT-1929 for information required under this special provision. All costs for conforming to this special provision are incidental to the contract.

(5) Firms wishing to export payroll data from their computer system into CRCS should have their payroll coordinator send several sample electronic files to Tess two months before a payroll needs to be submitted. Not every contractor's payroll system is capable of producing export files. For details, see pages 17-22 of the CRCS System Background Information manual available online on the Labor, Wages, and EEO Information page at:

<http://www.dot.wi.gov/business/civilrights/laborwages/docs/crc-payroll-manual.pdf>

DECEMBER 2013

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.

<http://roadwaystandards.dot.wi.gov/standards/cmm/cm-02-28.pdf#cm2-28.5>

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:

<http://roadwaystandards.dot.wi.gov/standards/forms/ws4567.doc>

Effective with September 2004 Letting

**WISCONSIN DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS AND TRANSPORTATION FACILITIES**

SUPPLEMENTAL REQUIRED CONTRACT PROVISIONS

- I. Wage Rates, Hours of labor and payment of Wages
- II. Payroll Requirements
- III. Postings at the Site of the Work
- IV. Affidavits
- V. Wage Rate Redistribution
- VI. Additional Classifications

I. WAGE RATES, HOURS OF LABOR AND PAYMENT OF WAGES

The schedule of "Minimum Wage Rates" attached hereto and made a part hereof furnishes the prevailing wage rates that have been determined pursuant to Section 103.50 of the Wisconsin Statutes. These wage rates are the minimum required to be paid to the various laborers, workers, mechanics and truck drivers employed by contractors and subcontractors on the construction work embraced by the contract and subject to prevailing hours and wages under Section 103.50, Stats. If necessary to employ laborers, workers, mechanics or truck drivers whose classification is not listed on the schedule, they shall be paid at rates conformable to those listed for similar classifications. Apprentices shall be paid at rates not less than those prescribed in their state indenture contracts.

While the wage rates shown are the minimum rates required by the contract to be paid during its life, this is not a representation that labor can be obtained at these rates. It is the responsibility of bidders to inform themselves as to the local labor conditions and prospective changes or adjustments of wage rates. No increase in the contract price shall be allowed or authorized on account of the payment of wage rates in excess of those listed herein.

Pursuant to Section 103.50 of the Wisconsin Statutes, the prevailing hours of labor have been determined to be up to 10 hours per day and 40 hours per calendar week Monday through Friday. If any laborer, worker, mechanic or truck driver is permitted or required to work more than the prevailing number of hours per day or per calendar week on this contract, they shall be paid for all hours in excess of the prevailing hours at a rate of at least one and one-half (1 1/2) times their hourly rate of pay. All work on Saturday, Sunday and the following holidays is to be paid at time and a half: (1) January 1, (2) the last Monday in May, (3) July 4, (4) the first Monday in September, (5) the fourth Thursday in November, (6) December 25, (7) the day before if January 1, July 4 or December 25 falls on a Saturday and (8) the day following if January 1, July 4 or December 25 falls on a Sunday.

All laborers, workers, mechanics and truck drivers shall be paid unconditionally not less often than once a week. Persons who own and operate their own trucks must receive the prevailing truck driver rate for the applicable type of truck (i.e. 2 axle, 3 or more axle, articulated, eculid or dumptor) he or she operates, plus an agreed upon amount for the use of his or her truck. Every owner-operator MUST be paid separately for their driving and for the use of their truck.

For those projects subject to the requirements of the Davis-Bacon Act, the Secretary of Labor will also have determined "Minimum Wage Rates" for work to be performed under the contract. These rates are, for all or most of the labor, worker, mechanic or truck driver classifications, identical to those established under Section 103.50 of the Wisconsin Statutes. In the event the rates are not identical, the higher of the two rates will govern.

II. PAYROLL REQUIREMENTS

All contractors and subcontractors must submit weekly Certified Payrolls and Compliance Statement verifying that all laborers, workers, mechanics and truck drivers working on the project have been paid the prevailing wage rates for all work performed under the contract required by Section 103.50 of the Wisconsin Statutes.

III. POSTINGS AT THE SITE OF THE WORK

In addition to the required postings furnished by the Department, the contractor shall post the following in at least one conspicuous place at the site of work:

- a. "NOTICE TO EMPLOYEES," which provides information required to be posted by the provisions of Section 103.50 of the Wisconsin Statutes.
- b. A copy of the State of Wisconsin Minimum Wages Rates. (Four pages.)
- c. A copy of the contractor's Equal Employment Opportunity Policy.
- d. On any project involving federal aid, in addition to the furnished postings, the contractor shall post a copy of the "Davis-Bacon Act, Minimum Wage Rates". (Three pages.)

IV. WAGE RATE REDISTRIBUTION

The amount specified as the hourly basic rate of pay and the amount(s) specified as the fringe benefit contribution(s), for all classes of laborers, workers, mechanics or truck drivers may be redistributed, when necessary, to conform to those specified in any applicable collective bargaining agreement, provided that both parties to such agreement

request and receive the approval for any such redistribution from both the Department of Transportation and the Department of Workforce Development prior to the implementation of such redistribution.

V. ADDITIONAL CLASSIFICATIONS

Any unlisted laborer or mechanic classification that is needed to perform work on this project, and is not included within the scope of any of the classifications listed in the application prevailing wage rate determination, may be added after award only if all of the following criteria have been met:

1. The affected employer(s) must make a written request to WisDOT Central Office to utilize the unlisted classification on this project.
2. The request must indicate the scope of the work to be performed by the unlisted classification and must indicate the proposed wage/fringe benefit package that the unlisted classification is to receive.
3. The work to be performed by the unlisted classification must not be performed by a classification that is included in the applicable prevailing wage rate determination.
4. The unlisted classification must be commonly employed in the area where the project is located.
5. The proposed wage/fringe benefit package must bear a reasonable relationship to those set forth in the applicable prevailing wage rate determination.
6. The request should be made prior to the actual performance of the work by the unlisted classification.
7. DWD must approve the use of the unlisted classification and the proposed wage/fringe benefit package. USDOL also must approve the use of the unlisted classification and the proposed wage/fringe benefit package on federal aid projects.
8. WisDOT and DWD may amend the proposed wage/fringe benefit package, as deemed necessary, and may set forth specific employment ratios and scope of work requirements in the approval document.

The approved wage/fringe benefit package shall be paid to all laborers, workers, mechanics or truck drivers performing work within the scope of that performed by the unlisted classification, from the first day on which such work is performed. In the event that work is performed by the unlisted classification prior to approval, the wage/fringe benefit package to be paid for such work must be in conformance with the wage/fringe

benefit package approved for such work. Under this arrangement a retroactive adjustment in wages and/or fringe benefits may be required to be made to the affected laborers, workers, mechanics or truck drivers by the affected employer(s).

**ANNUAL PREVAILING WAGE RATE DETERMINATION
FOR ALL STATE HIGHWAY PROJECTS
DANE COUNTY**

Compiled by the State of Wisconsin - Department of Workforce Development
for the Department of Transportation
Pursuant to s. 103.50, Stats.
Issued on May 1, 2015

CLASSIFICATION: Contractors are required to call the Department of Workforce Development if there are any questions regarding the proper trade or classification to be used for any worker on a public works project.

OVERTIME: Time and one-half must be paid for all hours worked over 10 hours per day and 40 hours per calendar week and for all hours worked on Saturday, Sunday and the following six (6) holidays: January 1; the last Monday in May; July 4; the 1st Monday in September; the 4th Thursday in November; December 25; the day before if January 1, July 4 or December 25 falls on a Saturday; the day following if January 1, July 4 or December 25 falls on a Sunday.

FUTURE INCREASE: If indicated for a specific trade or occupation, the full amount of such increase MUST be added to the "TOTAL" indicated for such trade or occupation on the date(s) such increase(s) becomes effective.

PREMIUM PAY: If indicated for a specific trade or occupation, the full amount of such pay MUST be added to the "HOURLY BASIC RATE OF PAY" indicated for such trade or occupation, whenever such pay is applicable.

SUBJOURNEY: Wage rates may be available for some of the classifications indicated below. Any employer that desires to use any subjourney classification on a project MUST request the applicable wage rate from the Department of Workforce Development PRIOR to the date such classification is used on such project. Form ERD-10880 is available for this purpose and can be obtained by writing to the Department of Workforce Development, Equal Rights Division, P.O. Box 8928, Madison, WI 53708.

<u>TRADE OR OCCUPATION</u>	<u>HOURLY BASIC RATE OF PAY</u>	<u>HOURLY FRINGE BENEFITS</u>	<u>TOTAL</u>
	\$	\$	\$
Bricklayer, Blocklayer or Stonemason	32.09	18.04	50.13
Carpenter	32.72	16.00	48.72
Future Increase(s): Add \$1.42/hr on 6/1/2015; Add \$1.42/hr on 6/1/2016. Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.			
Cement Finisher	35.18	16.78	51.96
Future Increase(s): Add \$1.87 on 6/1/15; Add \$1.75 on 6/1/16. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.40/hr when the Wisconsin Department of Transportation or responsible governing agency requires that work be performed at night under artificial illumination with traffic control and the work is completed after sunset and before sunrise.			
Electrician	33.93	22.77	56.70
Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.			
Fence Erector	18.00	6.09	24.09
Ironworker	31.50	20.01	51.51
Line Constructor (Electrical)	39.50	17.73	57.23
Painter	26.65	13.10	39.75
Pavement Marking Operator	29.22	25.90	55.12
Piledriver	33.24	16.00	49.24
Future Increase(s): Add \$1.44/hr on 6/1/2015; Add \$1.44/hr on 6/1/2016. Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.			
Roofer or Waterproofer	29.40	11.31	40.71
Teledata Technician or Installer	22.25	12.24	34.49
Tuckpointer, Caulker or Cleaner	23.60	7.10	30.70

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
	\$	\$	\$
Underwater Diver (Except on Great Lakes)	35.40	15.90	51.30
Heavy Equipment Operator - ELECTRICAL LINE CONSTRUCTION ONLY	35.55	15.57	51.12
Light Equipment Operator -ELECTRICAL LINE CONSTRUCTION ONLY	31.60	15.29	46.89
Heavy Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	27.65	13.44	41.09
Light Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	25.68	12.83	38.51
Groundman - ELECTRICAL LINE CONSTRUCTION ONLY	21.73	12.17	33.90

TRUCK DRIVERS

Single Axle or Two Axle	25.18	18.31	43.49
Future Increase(s): Add \$1.15/hr on 6/1/2015. Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.			
Three or More Axle	25.28	18.31	43.59
Future Increase(s): Add \$1.15/hr on 6/1/2015. Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.			
Articulated, Euclid, Dumptor, Off Road Material Hauler	30.27	21.15	51.42
Future Increase(s): Add \$1.25/hr on 6/1/2015; Add \$1.30/hr on 6/1/2016; Add \$1.25/hr on 6/1/2017. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm .			
Pavement Marking Vehicle	23.16	21.13	44.29
Shadow or Pilot Vehicle	24.37	17.77	42.14
Truck Mechanic	24.52	17.77	42.29

LABORERS

General Laborer	30.41	15.14	45.55
Future Increase(s): Add \$1.05/hr eff. 06/01/2015; Add \$1.00/hr eff. 06/01/2016; Add \$1.00/hr eff. 06/01/2017 Premium Pay: Add \$.10/hr for topman, air tool operator, vibrator or tamper operator (mechanical hand operated), chain saw operator and demolition burning torch laborer; Add \$.15/hr for bituminous worker (raker and luteman), formsetter (curb, sidewalk and pavement) and strike off man; Add \$.20/hr for blaster and powderman; Add \$.25/hr for bottomman; Add \$.35/hr for line and grade specialist; Add \$.45/hr for pipelayer. / DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).			
Asbestos Abatement Worker	18.00	9.58	27.58
Landscaper	30.41	15.14	45.55
Future Increase(s): Add \$1.05/hr eff. 06/01/2015; Add \$1.00/hr eff. 06/01/2016; Add \$1.00/hr eff. 06/01/2017 Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).			
Flagperson or Traffic Control Person	26.76	15.14	41.90

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
	\$	\$	\$
Future Increase(s): Add \$1.05/hr eff. 06/01/2015; Add \$1.00/hr eff. 06/01/2016; Add \$1.00/hr eff. 06/01/2017 Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.25/hr when the Wisconsin Department of Transportation or responsible governing agency requires that work be performed at night under artificial illumination with traffic control and the work is completed after sunset and before sunrise.			
Fiber Optic Laborer (Outside, Other Than Concrete Encased)	18.33	13.65	31.98
Railroad Track Laborer	14.50	5.29	19.79

HEAVY EQUIPMENT OPERATORS

Crane, Tower Crane, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 176 Ft or Over; Crane, Tower Crane, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of Over 100 Tons, Self-Erecting Tower Crane With a Lifting Capacity Of Over 4,000 Lbs., Crane With Boom Dollies; Traveling Crane (Bridge Type). Future Increase(s): Add \$1.25/hr on 6/1/2015; Add \$1.30/hr on 6/1/2016; Add \$1.25/hr on 6/1/2017. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm .	37.72	21.15	58.87
Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of 130,000 Lbs. or Over; Caisson Rig; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 175 Ft or Under; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of 100 Tons or Under, Self-Erecting Tower Crane With A Lifting Capacity Of 4,000 Lbs., & Under; Dredge (NOT Performing Work on the Great Lakes); Licensed Boat Pilot (NOT Performing Work on the Great Lakes); Pile Driver. Future Increase(s): Add \$1.25/hr on 6/1/2015; Add \$1.30/hr on 6/1/2016; Add \$1.25/hr on 6/1/2017. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm .	37.22	21.15	58.37
Air Track, Rotary or Percussion Drilling Machine &/or Hammers, Blaster; Asphalt Heater, Planer & Scarifier; Asphalt Milling Machine; Asphalt Screed; Automatic Subgrader (Concrete); Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of Under 130,000 Lbs., Backhoe (Mini, 15,000 Lbs. & Under); Bituminous (Asphalt) Plant & Paver, Screed; Boatmen (NOT Performing Work on the Great Lakes); Boring Machine (Directional, Horizontal or Vertical); Bridge (Bidwell) Paver; Bulldozer or Endloader; Concrete Batch Plant, Batch Hopper; Concrete Breaker (Large, Auto, Vibratory/Sonic, Manual or Remote); Concrete Bump Cutter, Grinder, Planing or Grooving Machine; Concrete Conveyor System; Concrete Laser/Screed; Concrete Paver (Slipform); Concrete Pump, Concrete Conveyor (Rotec or Bidwell Type); Concrete Slipform Placer Curb & Gutter Machine; Concrete Spreader & Distributor; Crane (Carry Deck, Mini) or Truck Mounted Hydraulic Crane (10 Tons or Under); Crane With a Lifting Capacity of 25 Tons or Under; Forestry Equipment, Timbco, Tree Shear, Tub Grinder, Processor; Gradall (Cruz-Aire Type); Grader or Motor Patrol; Grout Pump; Hydro-Blaster (10,000 PSI or Over); Loading Machine (Conveyor); Material or Stack Hoist; Mechanic or Welder; Milling Machine; Post Hole	36.72	21.15	57.87

<u>TRADE OR OCCUPATION</u>	<u>HOURLY BASIC RATE OF PAY</u>	<u>HOURLY FRINGE BENEFITS</u>	<u>TOTAL</u>
	\$	\$	\$
Digger or Driver; Roller (Over 5 Ton); Scraper (Self Propelled or Tractor Drawn) 5 cu yds or More Capacity; Shoulder Widener; Sideboom; Skid Rig; Stabilizing or Concrete Mixer (Self-Propelled or 14S or Over); Straddle Carrier or Travel Lift; Tractor (Scraper, Dozer, Pusher, Loader); Tractor or Truck Mounted Hydraulic Backhoe; Trencher (Wheel Type or Chain Type); Tube Finisher; Tugger (NOT Performing Work on the Great Lakes); Winches & A- Frames. Future Increase(s): Add \$1.25/hr on 6/1/2015; Add \$1.30/hr on 6/1/2016; Add \$1.25/hr on 6/1/2017. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm .			
Belting, Burlap, Texturing Machine; Broom or Sweeper; Compactor (Self-Propelled or Tractor Mounted, Towed & Light Equipment); Concrete Finishing Machine (Road Type); Environmental Burner; Farm or Industrial Type Tractor; Fireman (Asphalt Plant, Pile Driver & Derrick NOT Performing Work on the Great Lakes); Forklift; Greaser; Hoist (Tugger, Automatic); Jeep Digger; Joint Sawyer (Multiple Blade); Launch (NOT Performing Work on the Great Lakes); Lift Slab Machine; Mechanical Float; Mulcher; Power Subgrader; Robotic Tool Carrier (With or Without Attachments); Roller (Rubber Tire, 5 Ton or Under); Self Propelled Chip Spreader; Shouldering Machine; Skid Steer Loader (With or Without Attachments); Telehandler; Tining or Curing Machine. Future Increase(s): Add \$1.25/hr on 6/1/2015; Add \$1.30/hr on 6/1/2016; Add \$1.25/hr on 6/1/2017. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm .	36.46	21.15	57.61
Air Compressor (&/or 400 CFM or Over); Air, Electric or Hydraulic Jacking System; Augers (Vertical & Horizontal); Automatic Belt Conveyor & Surge Bin; Boiler (Temporary Heat); Concrete Proportioning Plant; Crusher, Screening or Wash Plant; Generator (&/or 150 KW or Over); Heaters (Mechanical); High Pressure Utility Locating Machine (Daylighting Machine); Mudjack; Oiler; Prestress Machine; Pug Mill; Pump (3 Inch or Over) or Well Points; Rock, Stone Breaker; Screed (Milling Machine); Stump Chipper; Tank Car Heaters; Vibratory Hammer or Extractor, Power Pack. Future Increase(s): Add \$1.25/hr on 6/1/2015; Add \$1.30/hr on 6/1/2016; Add \$1.25/hr on 6/1/2017. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm .	36.17	21.15	57.32
Fiber Optic Cable Equipment.	28.89	17.95	46.84

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SCHEDULE OF ITEMS

REVISED:

CONTRACT:
20150512014PROJECT(S):
5992-09-69
5992-09-71FEDERAL ID(S):
N/A
N/A

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS

SECTION 0001 Contract Items

0010	201.0105 Clearing	1.000				
		STA	.		.	
0020	201.0205 Grubbing	1.000				
		STA	.		.	
0030	203.0600.S Removing Old Structure Over Waterway With Minimal Debris (station) 01. Station 10+00	LUMP	LUMP			.
0040	204.0100 Removing Pavement	2,973.000				
		SY	.		.	
0050	204.0150 Removing Curb & Gutter	1,246.000				
		LF	.		.	
0060	204.0155 Removing Concrete Sidewalk	603.000				
		SY	.		.	
0070	204.0195 Removing Concrete Bases	10.000				
		EACH	.		.	
0080	204.0210 Removing Manholes	8.000				
		EACH	.		.	
0090	204.0220 Removing Inlets	10.000				
		EACH	.		.	

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5992-09-69

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0100	204.0245 Removing Storm Sewer (size) 01. 12-Inch Or Less	438.000 LF	.		.	
0110	204.0245 Removing Storm Sewer (size) 02. 15 to 18-Inch	395.000 LF	.		.	
0120	204.0291.S Abandoning Sewer	2.780 CY	.		.	
0130	205.0100 Excavation Common	5,212.000 CY	.		.	
0140	205.0501.S Excavation, Hauling, and Disposal of Petroleum Contaminated Soil	400.000 TON	.		.	
0150	206.1000 Excavation for Structures Bridges (structure) 01. B-13-0677	LUMP	LUMP		.	
0160	210.0100 Backfill Structure	510.000 CY	.		.	
0170	213.0100 Finishing Roadway (project) 01. 5992-09-69	1.000 EACH	.		.	
0180	213.0100 Finishing Roadway (project) 02. 5992-09-71	1.000 EACH	.		.	
0190	305.0120 Base Aggregate Dense 1 1/4-Inch	5,635.000 TON	.		.	

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			DOLLARS	CTS	DOLLARS	CTS
0200	311.0110 Breaker Run	1,595.000 TON	.		.	
0210	415.0410 Concrete Pavement Approach Slab	210.000 SY	.		.	
0220	416.0170 Concrete Driveway 7-Inch	110.000 SY	.		.	
0230	455.0120 Asphaltic Material PG64-28	112.000 TON	.		.	
0240	455.0605 Tack Coat	272.200 GAL	.		.	
0250	460.1103 HMA Pavement Type E-3	2,035.000 TON	.		.	
0260	460.2000 Incentive Density HMA Pavement	1,310.000 DOL	1.00000		1310.00	
0270	460.4000 HMA Cold Weather Paving	509.000 TON	.		.	
0280	502.0100 Concrete Masonry Bridges	471.000 CY	.		.	
0290	502.3200 Protective Surface Treatment	485.000 SY	.		.	
0300	505.0405 Bar Steel Reinforcement HS Bridges	16,420.000 LB	.		.	

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			DOLLARS	CTS	DOLLARS	CTS
0310	505.0605 Bar Steel Reinforcement HS Coated Bridges	56,040.000 LB	.		.	
0320	516.0500 Rubberized Membrane Waterproofing	42.000 SY	.		.	
0330	517.1015.S Concrete Staining Multi-Color (structure) 01. B-13-0677	1,025.000 SF	.		.	
0340	517.1050.S Architectural Surface Treatment (structure) 01. B-13-0677	599.000 SF	.		.	
0350	517.1050.S Architectural Surface Treatment (structure) 02. Traffic Face B-13-0677	426.000 SF	.		.	
0360	522.1018 Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch	2.000 EACH	.		.	
0370	550.2106 Piling CIP Concrete 10 3/4 X 0. 365-Inch	2,580.000 LF	.		.	
0380	601.0411 Concrete Curb & Gutter 30-Inch Type D	1,140.000 LF	.		.	
0390	601.0600 Concrete Curb Pedestrian	72.000 LF	.		.	
0400	602.0410 Concrete Sidewalk 5-Inch	6,150.000 SF	.		.	

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			DOLLARS	CTS	DOLLARS	CTS
0410	602.0415 Concrete Sidewalk 6-Inch	740.000 SF	.		.	
0420	602.0420 Concrete Sidewalk 7-Inch	685.000 SF	.		.	
0430	602.0515 Curb Ramp Detectable Warning Field Natural Patina	208.000 SF	.		.	
0440	606.0300 Riprap Heavy	350.000 CY	.		.	
0450	608.0312 Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	164.000 LF	.		.	
0460	608.0315 Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	218.000 LF	.		.	
0470	608.0318 Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	338.000 LF	.		.	
0480	608.0412 Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	179.000 LF	.		.	
0490	608.0418 Storm Sewer Pipe Reinforced Concrete Class IV 18-Inch	70.000 LF	.		.	
0500	611.0624 Inlet Covers Type H	12.000 EACH	.		.	
0510	611.2004 Manholes 4-FT Diameter	1.000 EACH	.		.	

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			DOLLARS	CTS	DOLLARS	CTS
0520	611.2044 Manholes 4x4-FT	1.000				
	EACH		.		.	
0530	611.3004 Inlets 4-FT Diameter	3.000				
	EACH		.		.	
0540	611.3230 Inlets 2x3-FT	8.000				
	EACH		.		.	
0550	611.8110 Adjusting Manhole Covers	1.000				
	EACH		.		.	
0560	611.8115 Adjusting Inlet Covers	2.000				
	EACH		.		.	
0570	611.9800.S Pipe Grates	2.000				
	EACH		.		.	
0580	612.0406 Pipe Underdrain Wrapped 6-Inch	310.000				
	LF		.		.	
0590	616.0700.S Fence Safety	1,500.000				
	LF		.		.	
0600	619.1000 Mobilization	1.000				
	EACH		.		.	
0610	620.0300 Concrete Median Sloped Nose	440.000				
	SF		.		.	
0620	623.0200 Dust Control Surface Treatment	13,210.000				
	SY		.		.	

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			DOLLARS	CTS	DOLLARS	CTS
0630	625.0100 Topsoil	2,154.000 SY	.		.	
0640	628.1504 Silt Fence	700.000 LF	.		.	
0650	628.1520 Silt Fence Maintenance	1,400.000 LF	.		.	
0660	628.1905 Mobilizations Erosion Control	4.000 EACH	.		.	
0670	628.1910 Mobilizations Emergency Erosion Control	8.000 EACH	.		.	
0680	628.2006 Erosion Mat Urban Class I Type A	2,154.000 SY	.		.	
0690	628.6005 Turbidity Barriers	150.000 SY	.		.	
0700	628.7020 Inlet Protection Type D	24.000 EACH	.		.	
0710	628.7560 Tracking Pads	5.000 EACH	.		.	
0720	629.0210 Fertilizer Type B	1.350 CWT	.		.	
0730	630.0140 Seeding Mixture No. 40	39.000 LB	.		.	

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			DOLLARS	CTS	DOLLARS	CTS
0740	642.5201 Field Office Type C	1.000 EACH	.		.	
0750	643.0100 Traffic Control (project) 01. 5992-09-69	1.000 EACH	.		.	
0760	643.0100 Traffic Control (project) 02. 5992-09-71	1.000 EACH	.		.	
0770	643.0300 Traffic Control Drums	3,274.000 DAY	.		.	
0780	643.0420 Traffic Control Barricades Type III	1,931.000 DAY	.		.	
0790	643.0500 Traffic Control Flexible Tubular Marker Posts	123.000 EACH	.		.	
0800	643.0600 Traffic Control Flexible Tubular Marker Bases	123.000 EACH	.		.	
0810	643.0705 Traffic Control Warning Lights Type A	3,886.000 DAY	.		.	
0820	643.0715 Traffic Control Warning Lights Type C	794.000 DAY	.		.	
0830	643.0900 Traffic Control Signs	3,318.000 DAY	.		.	

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			DOLLARS	CTS	DOLLARS	CTS
0840	643.0920 Traffic Control Covering Signs Type II	1.000 EACH	.		.	
0850	643.1000 Traffic Control Signs Fixed Message	272.000 SF	.		.	
0860	643.1050 Traffic Control Signs PCMS	35.000 DAY	.		.	
0870	643.2000 Traffic Control Detour (project) 01. 5992-09-69	1.000 EACH	.		.	
0880	643.2000 Traffic Control Detour (project) 02. 5992-09-71	1.000 EACH	.		.	
0890	643.3000 Traffic Control Detour Signs	5,451.000 DAY	.		.	
0900	645.0120 Geotextile Fabric Type HR	735.000 SY	.		.	
0910	646.0106 Pavement Marking Epoxy 4-Inch	4,400.000 LF	.		.	
0920	646.0126 Pavement Marking Epoxy 8-Inch	555.000 LF	.		.	
0930	646.0600 Removing Pavement Markings	3,100.000 LF	.		.	
0940	647.0156 Pavement Marking Arrows Epoxy Type 1	2.000 EACH	.		.	

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			DOLLARS	CTS	DOLLARS	CTS
0950	647.0166 Pavement Marking Arrows Epoxy Type 2	6.000 EACH	.		.	
0960	647.0176 Pavement Marking Arrows Epoxy Type 3	3.000 EACH	.		.	
0970	647.0206 Pavement Marking Arrows Bike Lane Epoxy	8.000 EACH	.		.	
0980	647.0306 Pavement Marking Symbols Bike Lane Epoxy	11.000 EACH	.		.	
0990	647.0356 Pavement Marking Words Epoxy	3.000 EACH	.		.	
1000	647.0556 Pavement Marking Stop Line Epoxy 12-Inch	175.000 LF	.		.	
1010	647.0606 Pavement Marking Island Nose Epoxy	12.000 EACH	.		.	
1020	647.0766 Pavement Marking Crosswalk Epoxy 6-Inch	785.000 LF	.		.	
1030	647.0786 Pavement Marking Crosswalk Epoxy 18-Inch	80.000 LF	.		.	
1040	647.0955 Removing Pavement Markings Arrows	4.000 EACH	.		.	
1050	647.0965 Removing Pavement Markings Words	4.000 EACH	.		.	

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1060	649.0200 Temporary Pavement Marking Reflective Paint 4-Inch	2,430.000 LF	.		.	
1070	649.0400 Temporary Pavement Marking Removable Tape 4-Inch	1,860.000 LF	.		.	
1080	649.1000 Temporary Pavement Marking Stop Line Removable Tape 12-Inch	161.000 LF	.		.	
1090	650.4000 Construction Staking Storm Sewer	16.000 EACH	.		.	
1100	650.4500 Construction Staking Subgrade	1,100.000 LF	.		.	
1110	650.5000 Construction Staking Base	1,100.000 LF	.		.	
1120	650.5500 Construction Staking Curb Gutter and Curb & Gutter	1,660.000 LF	.		.	
1130	650.6500 Construction Staking Structure Layout (structure) 01. B-13-0677	LUMP	LUMP		.	
1140	650.8500 Construction Staking Electrical Installations (project) 01. 5992-09-69	LUMP	LUMP		.	

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			DOLLARS	CTS	DOLLARS	CTS
1150	650.8500 Construction Staking Electrical Installations (project) 02. 5992-09-71	LUMP	LUMP			.
1160	650.9910 Construction Staking Supplemental Control (project) 01. 5992-09-69	LUMP	LUMP			.
1170	650.9910 Construction Staking Supplemental Control (project) 02. 5992-09-71	LUMP	LUMP			.
1180	650.9920 Construction Staking Slope Stakes	1,100.000 LF	.			.
1190	652.0125 Conduit Rigid Metallic 2-Inch	12.000 LF	.			.
1200	652.0135 Conduit Rigid Metallic 3-Inch	24.000 LF	.			.
1210	652.0225 Conduit Rigid Nonmetallic Schedule 40 2-Inch	831.000 LF	.			.
1220	652.0235 Conduit Rigid Nonmetallic Schedule 40 3-Inch	1,122.000 LF	.			.
1230	652.0325 Conduit Rigid Nonmetallic Schedule 80 2-Inch	265.000 LF	.			.
1240	652.0335 Conduit Rigid Nonmetallic Schedule 80 3-Inch	1,520.000 LF	.			.

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			DOLLARS	CTS	DOLLARS	CTS
1250	652.0605 Conduit Special 2-Inch	40.000 LF	.		.	
1260	652.0800 Conduit Loop Detector	661.000 LF	.		.	
1270	653.0905 Removing Pull Boxes	6.000 EACH	.		.	
1280	654.0110 Concrete Bases Type 10	3.000 EACH	.		.	
1290	655.0800 Loop Detector Wire	1,704.000 LF	.		.	
1300	690.0150 Sawing Asphalt	740.000 LF	.		.	
1310	690.0250 Sawing Concrete	1,610.000 LF	.		.	
1320	715.0502 Incentive Strength Concrete Structures	2,826.000 DOL	1.00000		2826.00	
1330	SPV.0045 Special 01. Temporary Crosswalk Access	138.000 DAY	.		.	
1340	SPV.0060 Special 01. Utility Line Opening (ULO)	16.000 EACH	.		.	
1350	SPV.0060 Special 02. Catch Basin 6x6-Ft Special	1.000 EACH	.		.	

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			DOLLARS	CTS	DOLLARS	CTS
1360	SPV.0060 Special 03. Manhole Cover Type Special Logo	4.000 EACH	.		.	
1370	SPV.0060 Special 04. Sanitary Sewer Access Structure, 4-Foot Diameter	1.000 EACH	.		.	
1380	SPV.0060 Special 05. Sanitary Sewer Tap	2.000 EACH	.		.	
1390	SPV.0060 Special 06. Sewer Electronic Markers	28.000 EACH	.		.	
1400	SPV.0060 Special 07. Sanitary Lateral Reconnect	14.000 EACH	.		.	
1410	SPV.0060 Special 08. Remove Sanitary Sewer Structure	2.000 EACH	.		.	
1420	SPV.0060 Special 09. Abandon Sanitary Sewer - Pipe Plug	4.000 EACH	.		.	
1430	SPV.0060 Special 10. Water Valve Access Structure	1.000 EACH	.		.	
1440	SPV.0060 Special 11. Furnish & Install 6-Inch Valve	4.000 EACH	.		.	
1450	SPV.0060 Special 12. Furnish & Install 8-Inch Valve	6.000 EACH	.		.	

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			DOLLARS	CTS	DOLLARS	CTS
1460	SPV.0060 Special 13. Furnish & Install 10-Inch Valve	2.000 EACH	.		.	
1470	SPV.0060 Special 14. Furnish & Install 12-Inch Valve	2.000 EACH	.		.	
1480	SPV.0060 Special 15. Furnish and Install Hydrant	3.000 EACH	.		.	
1490	SPV.0060 Special 16. Disconnect and Reconnect 1-Inch Service Lateral	5.000 EACH	.		.	
1500	SPV.0060 Special 17. Cut-In or Connect-To Existing Water System	5.000 EACH	.		.	
1510	SPV.0060 Special 18. Furnish Excavation and Ditch for Live Tap	1.000 EACH	.		.	
1520	SPV.0060 Special 19. Cut Off Existing Water Main	1.000 EACH	.		.	
1530	SPV.0060 Special 20. Abandon Water Valve Box	9.000 EACH	.		.	
1540	SPV.0060 Special 21. Abandon Water Valve Access Structure	1.000 EACH	.		.	
1550	SPV.0060 Special 22. Remove and Salvage Existing Hydrant	3.000 EACH	.		.	
1560	SPV.0060 Special 23. Concrete Base Offset	1.000 EACH	.		.	

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			DOLLARS	CTS	DOLLARS	CTS
1570	SPV.0060 Special 24. Electrical Pullbox Type I	7.000 EACH	.		.	
1580	SPV.0060 Special 25. Electrical Pullbox Type III	5.000 EACH	.		.	
1590	SPV.0060 Special 26. Electrical Pullbox Type V	5.000 EACH	.		.	
1600	SPV.0060 Special 27. Concrete Base Type G	1.000 EACH	.		.	
1610	SPV.0060 Special 28. Concrete Base Type LB-3	6.000 EACH	.		.	
1620	SPV.0060 Special 29. Concrete Base Type LB-8	2.000 EACH	.		.	
1630	SPV.0060 Special 30. Concrete Base Type P	2.000 EACH	.		.	
1640	SPV.0090 Special 01. Concrete Curb and Gutter 24-Inch Special, City of Madison Type H	425.000 LF	.		.	
1650	SPV.0090 Special 02. Concrete Curb and Gutter 30-Inch Special, City of Madison Type X	95.000 LF	.		.	
1660	SPV.0090 Special 03. Sanitary Sewer Pipe PVC, 8-Inch	408.000 LF	.		.	

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N/A

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1670	SPV.0090 Special 04. Sanitary Sewer Lateral	405.000 LF	.		.	
1680	SPV.0090 Special 05. Select Fill For Sanitary Sewer	813.000 LF	.		.	
1690	SPV.0090 Special 06. Remove Sanitary Sewer Pipe	10.000 LF	.		.	
1700	SPV.0090 Special 07. Utility Trench Patch Type III	195.000 LF	.		.	
1710	SPV.0090 Special 08. Furnish & Install 6-Inch Pipe & Fittings	56.000 LF	.		.	
1720	SPV.0090 Special 09. Furnish & Install 8-Inch Pipe & Fittings	574.000 LF	.		.	
1730	SPV.0090 Special 10. Furnish & Install 10-Inch Pipe & Fittings	44.000 LF	.		.	
1740	SPV.0090 Special 11. Furnish & Install 12-Inch Pipe & Fittings	512.000 LF	.		.	
1750	SPV.0090 Special 12. Horizontal Directional Drill Water 12-Inch Pipe	81.000 LF	.		.	
1760	SPV.0090 Special 13. Extend and Reconnect 1-Inch Service Lateral	125.000 LF	.		.	

SCHEDULE OF ITEMS

REVISED:

CONTRACT:

PROJECT(S):

FEDERAL ID(S):

20150512014

5992-09-69

N/A

5992-09-71

N/A

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1770	SPV.0090 Special 14. Extend and Reconnect 1. 5-Inch Service Lateral	25.000 LF	.		.	
1780	SPV.0090 Special 15. Extend and Reconnect 2-Inch Service Lateral	20.000 LF	.		.	
1790	SPV.0090 Special 16. Select Fill for Water Main	1,186.000 LF	.		.	
1800	SPV.0090 Special 17. Furnish and Install 2-Inch Foam Board Insulation	48.000 LF	.		.	
1810	SPV.0105 Special 01. Removing Steel Sheet Piling	LUMP	LUMP		.	
1820	SPV.0105 Special 02. Wastewater Control 150 GPM	LUMP	LUMP		.	
1830	SPV.0105 Special 03. Construction Staking Sanitary Sewer	LUMP	LUMP		.	
1840	SPV.0105 Special 04. Construction Staking Water Main	LUMP	LUMP		.	
1850	SPV.0105 Special 05. Project Dewatering	LUMP	LUMP		.	
1860	SPV.0165 Special 01. Cut-Stone Boulders	540.000 SF	.		.	

SCHEDULE OF ITEMS

REVISED:

CONTRACT:
20150512014PROJECT(S):
5992-09-69
5992-09-71FEDERAL ID(S):
N/A
N/A

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1870	SPV.0180 Special 01. Concrete Speed Hump	50.000 SY	.		.	
1880	SPV.0195 Special 01. Select Crushed Material For Travel Corridor Interstitial Space	55.000 TON	.		.	
1890	SPV.0195 Special 02. Sediment Excavation	350.000 TON	.		.	
	SECTION 0001 TOTAL				.	
	TOTAL BID				.	

PLEASE ATTACH SCHEDULE OF ITEMS HERE