

BID OF _____

2017

PROPOSAL, CONTRACT, BOND AND SPECIFICATIONS

FOR

LAKEVIEW RESERVOIR PIPELINE IMPROVEMENTS PHASE 2

CONTRACT NO. 7452

PROJECT NO. 53W1903

MUNIS NO. 10439

IN

MADISON, DANE COUNTY, WISCONSIN

AWARDED BY THE COMMON COUNCIL
MADISON, WISCONSIN ON _____

CITY ENGINEERING DIVISION
1600 EMIL STREET
MADISON, WISCONSIN 53713

<https://bidexpress.com/login>

**LAKEVIEW RESERVOIR PIPELINE IMPROVEMENTS PHASE 2
CONTRACT NO. 7452**

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This Proposal, and Agreement have
been prepared by:

**MADISON WATER UTILITY
CITY OF MADISON
MADISON, DANE COUNTY, WISCONSIN**





Alan L. Larson, P.E., B.C.E.E.
Principal Engineer, Madison Water Utility

3/20/17

ALL: kbm

SECTION A: ADVERTISEMENT FOR BIDS AND INSTRUCTIONS TO BIDDERS

REQUEST FOR BID FOR PUBLIC WORKS CONSTRUCTION CITY OF MADISON, WISCONSIN

A BEST VALUE CONTRACTING MUNICIPALITY

PROJECT NAME:	LAKEVIEW RESERVOIR PIPELINE IMPROVEMENTS PHASE 2
CONTRACT NO.:	7452
SBE GOAL	5%
BID BOND	5%
PRE BID MEETING (1:00 P.M.)	3/31/17
PREQUALIFICATION APPLICATION DUE (1:00 P.M)	3/31/17
BID SUBMISSION (1:00 P.M.)	4/7/17
BID OPEN (1:30 P.M.)	4/7/17
PUBLISHED IN WSJ	3/24/17 & 3/31/17

PRE BID MEETING: Representatives of the Affirmative Action Department will be present to discuss the Small Business Enterprise requirements at 1600 Emil Street, Madison Wisconsin.

PREQUALIFICATION APPLICATION: Forms are available on our website, www.cityofmadison.com/business/pw/forms.cfm. If not currently prequalified in the categories listed in Section A, an amendment to your Prequalification will need to be submitted prior to the same due date. Postmark is not applicable.

BIDS TO BE SUBMITTED by hand to 1600 EMIL ST., MADISON, WI 53713 or online at www.bidexpress.com.

THE BID OPENING is at 1600 EMIL ST., MADISON, WI 53713.

STANDARD SPECIFICATIONS

The City of Madison's Standard Specifications for Public Works Construction - 2017 Edition, as supplemented and amended from time to time, forms a part of these contract documents as if attached hereto.

These standard specifications are available on the City of Madison Public Works website, www.cityofmadison.com/Business/PW/specs.cfm.

The Contractor shall review these Specifications prior to preparation of proposals for the work to be done under this contract, with specific attention to Article 102, "BIDDING REQUIREMENTS AND CONDITIONS" and Article 103, "AWARD AND EXECUTION OF THE CONTRACT." For the convenience of the bidder, below are highlights of three subsections of the specifications.

SECTION 102.1: PRE-QUALIFICATION OF BIDDERS

In accordance with Wisconsin State Statutes 66.0901 (2) and (3), all bidders must submit to the Board of Public Works proof of responsibility on forms furnished by the City. The City requires that all bidders be qualified on a biennial basis.

Bidders must present satisfactory evidence that they have been regularly engaged in the type of work specified herein and they are fully prepared with necessary capital, materials, machinery and supervisory personnel to conduct the work to be contracted for to the satisfaction of the City. All bidders must be pre-qualified by the Board of Public Works for the type of construction on which they are bidding prior to the opening of the bid.

In accordance with Section 39.02(9)(a)l. of the General Ordinances, all bidders shall submit in writing to the Affirmative Action Division Manager of the City of Madison, a Certificate of Compliance or an Affirmative Action Plan at the same time or prior to the submission of the proof of responsibility forms.

The bidder shall be disqualified if the bidder fails to or refuses to, prior to opening of the bid, submit a Certificate of compliance, Affirmative Action Plan or Affirmative Action Data Update, as applicable, as defined by Section 39.02 of the General Ordinances (entitled Affirmative Action) and as required by Section 102.11 of the Standard Specifications.

SECTION 102.4 PROPOSAL

No bid will be accepted that does not contain an adequate or reasonable price for each and every item named in the Schedule of Unit Prices.

A lump sum bid for the work in accordance with the plans and specifications is required. The lump sum bid must be the same as the total amounts bid for the various items and it shall be inserted in the space provided.

All papers bound with or attached to the proposal form are considered a part thereof and must not be detached or altered when the proposal is submitted. The plans, specifications and other documents designated in the proposal form will be considered a part of the proposal whether attached or not.

A proposal submitted by an individual shall be signed by the bidder or by a duly authorized agent. A proposal submitted by a partnership shall be signed by a member/partner or by a duly authorized agent thereof. A proposal submitted by a corporation shall be signed by an authorized officer or duly authorized registered agent of such corporation, and the proposal shall show the name of the State under the laws of which such corporation was chartered. The required signatures shall in all cases appear in the space provided thereof on the proposal.

Each proposal shall be placed, together with the proposal guaranty, in a sealed envelope, so marked as to indicate name of project, the contract number or option to which it applies, and the name and address of the Contractor or submitted electronically through Bid Express (www.bidexpress.com). Proposals will be accepted at the location, the time and the date designated in the advertisement. Proposals received after the time and date designated will be returned to the bidder unopened.

SECTION 102.5: BID DEPOSIT (PROPOSAL GUARANTY)

All bids, sealed or electronic, must be accompanied with a Bid Bond equal to at least 5% of the bid or a Certificate of Annual/Biennial Bid Bond or certified check, payable to the City Treasurer. Bid deposit of the successful bidders shall be returned within forty-eight (48) hours following execution of the contract and bond as required.

MINOR DISCREPENCIES

Bidder is responsible for submitting all forms necessary for the City to determine compliance with State and City bidding requirements. Notwithstanding any language to the contrary contained herein, the City may exercise its discretion to allow bidders to correct or supplement submissions after bid opening, if the minor discrepancy, bid irregularity or omission is insignificant and not one related to price, quality, quantity, time of completion or performance of the contract.

Bidders for this Contract(s) must be Pre-Qualified for at least one of the following type(s) of construction denoted by an

Building Demolition

- 101 Asbestos Removal
- 120 House Mover

- 110 Building Demolition

Street, Utility and Site Construction

- 201 Asphalt Paving
- 205 Blasting
- 210 Boring/Pipe Jacking
- 215 Concrete Paving
- 220 Con. Sidewalk/Curb & Gutter/Misc. Flat Work
- 221 Concrete Bases and Other Concrete Work
- 222 Concrete Removal
- 225 Dredging
- 230 Fencing
- 235 Fiber Optic Cable/Conduit Installation
- 240 Grading and Earthwork
- 241 Horizontal Saw Cutting of Sidewalk
- 242 Infrared Seamless Patching
- 245 Landscaping, Maintenance
- 246 Ecological Restoration
- 250 Landscaping, Site and Street
- 251 Parking Ramp Maintenance
- 252 Pavement Marking
- 255 Pavement Sealcoating and Crack Sealing
- 260 Petroleum Above/Below Ground Storage Tank Removal/Installation
- 262 Playground Installer

- 265 Retaining Walls, Precast Modular Units
- 270 Retaining Walls, Reinforced Concrete
- 275 Sanitary, Storm Sewer and Water Main Construction
- 276 Sawcutting
- 280 Sewer Lateral Drain Cleaning/Internal TV Insp.
- 285 Sewer Lining
- 290 Sewer Pipe Bursting
- 295 Soil Borings
- 300 Soil Nailing
- 305 Storm & Sanitary Sewer Laterals & Water Svc.
- 310 Street Construction
- 315 Street Lighting
- 318 Tennis Court Resurfacing
- 320 Traffic Signals
- 325 Traffic Signing & Marking
- 332 Tree pruning/removal
- 333 Tree, pesticide treatment of
- 335 Trucking
- 340 Utility Transmission Lines including Natural Gas, Electrical & Communications
- 399 Other _____

Bridge Construction

- 501 Bridge Construction and/or Repair

Building Construction

- 401 Floor Covering (including carpet, ceramic tile installation, rubber, VCT)
- 402 Building Automation Systems
- 403 Concrete
- 404 Doors and Windows
- 405 Electrical - Power, Lighting & Communications
- 410 Elevator - Lifts
- 412 Fire Suppression
- 413 Furnishings - Furniture and Window Treatments
- 415 General Building Construction, Equal or Less than \$250,000
- 420 General Building Construction, \$250,000 to \$1,500,000
- 425 General Building Construction, Over \$1,500,000
- 428 Glass and/or Glazing
- 429 Hazardous Material Removal
- 430 Heating, Ventilating and Air Conditioning (HVAC)
- 433 Insulation - Thermal
- 435 Masonry/Tuck pointing

- 437 Metals
- 440 Painting and Wallcovering
- 445 Plumbing
- 450 Pump Repair
- 455 Pump Systems
- 460 Roofing and Moisture Protection
- 464 Tower Crane Operator
- 461 Solar Photovoltaic/Hot Water Systems
- 465 Soil/Groundwater Remediation
- 466 Warning Sirens
- 470 Water Supply Elevated Tanks
- 475 Water Supply Wells
- 480 Wood, Plastics & Composites - Structural & Architectural
- 499 Other _____

State of Wisconsin Certifications

- 1 Class 5 Blaster - Blasting Operations and Activities 2500 feet and closer to inhabited buildings for quarries, open pits and road cuts.
- 2 Class 6 Blaster - Blasting Operations and Activities 2500 feet and closer to inhabited buildings for trenches, site excavations, basements, underwater demolition, underground excavations, or structures 15 feet or less in height.
- 3 Class 7 Blaster - Blasting Operations and Activities for structures greater than 15 ' in height, bridges, towers, and any of the objects or purposes listed as "Class 5 Blaster or Class 6 Blaster".
- 4 Petroleum Above/Below Ground Storage Tank Removal and Installation (Attach copies of State Certifications.)
- 5 Hazardous Material Removal (Contractor to be certified for asbestos and lead abatement per the Wisconsin Department of Health Services, Asbestos and Lead Section (A&LS).) See the following link for application: www.dhs.wisconsin.gov/Asbestos/Cert. State of Wisconsin Performance of Asbestos Abatement Certificate must be attached.
- 6 Certification number as a Certified Arborist or Certified Tree Worker as administered by the International Society of Arboriculture
- 7 Pesticide application (Certification for Commercial Applicator For Hire with the certification in the category of turf and landscape (3.0) and possess a current license issued by the DATCP)
- 8 State of Wisconsin Master Plumbers License.

SECTION B: PROPOSAL

Please refer to the
Bid Express Website
at <https://bidexpress.com>
look up contract number
and go to
Section B: Proposal Page

You can access all City of Madison bid solicitations for FREE at www.bidexpress.com

Click on the "Register for Free" button and follow the instructions to register your company and yourself. You will be asked for a payment subscription preference, since you may wish to bid online someday. Simply choose the method to pay on a 'per bid' basis. This requires no payment until / unless you actually bid online. You can also choose the monthly subscription plan at this time. You will, however, be asked to provide payment information. Remember, you can change your preference at anytime. You will then be able to complete your free registration and have full access to the site. Your free access does not require completion of the 'Digital ID' process, so you will have instant access for viewing and downloading. To be prepared in case you ever do wish to bid online, you may wish to establish your digital ID also, since you cannot bid without a Digital ID.

If you have any problems with the free registration process, you can call the bidexpress help team, toll free at 1-888-352-2439 (option 1, option1).

SECTION C: SMALL BUSINESS ENTERPRISE

Instructions to Bidders City of Madison SBE Program Information

2 Small Business Enterprise (SBE) Program Information

2.1 Policy and Goal

The City of Madison reaffirms its policy of nondiscrimination in the conduct of City business by maintaining a procurement process which remains open to all who have the potential and ability to sell goods and services to the City. It is the policy of the City of Madison to allow Small Business Enterprises (SBE) maximum feasible opportunity to participate in City of Madison contracting. The bidder acknowledges that its bid has been submitted in accordance with the SBE program and is for the public's protection and welfare.

Please refer to the "ADVERTISEMENT FOR BIDS" for the goal for the utilization of SBEs on this project. SBEs may participate as subcontractors, vendors and/or suppliers, which provide a commercially useful function. The dollar value for SBE suppliers or 'materials only' vendors shall be discounted to 60% for purposes of meeting SBE goals.

A bidder which achieves or exceeds the SBE goal will be in compliance with the SBE requirements of this project. In the event that the bidder is unable to achieve the SBE goal, the bidder must demonstrate that a good faith effort to do so was made. Failure to either achieve the goal or demonstrate a good faith effort to do so will be grounds for the bidder being deemed a non-responsible contractor ineligible for award of this contract.

A bidder may count towards its attainment of the SBE goal only those expenditures to SBEs that perform a commercially useful function. For purposes of evaluating a bidder's responsiveness to the attainment of the SBE goal, the contract participation by an SBE is based on the percentage of the total base bid proposed by the Contractor. The total base bid price is inclusive of all addenda.

Work performed by an SBE firm in a particular transaction can be counted toward the goal only if it involves a commercially useful function. That is, in light of industry practices and other relevant considerations, does the SBE firm have a necessary and useful role in the transaction, of a kind for which there is a market outside the context of the SBE Program, or is the firm's role a superfluous step added in an attempt to obtain credit towards goals? If, in the judgment of the Affirmative Action Division, the SBE firm will not perform a commercially useful function in the transaction, no credit towards goals will be awarded.

The question of whether a firm is performing a commercially useful function is completely separate from the question of whether the firm is an eligible SBE. A firm is eligible if it meets the definitional criteria and ownership and control requirements, as set forth in the City of Madison's SBE Program.

If the City of Madison determines that the SBE firm is performing a commercially useful function, then the City of Madison must then decide what that function is. If the commercially useful function is that of an SBE vendor / supplier that regularly transacts business with the respective product, then the City of Madison will count 60% of the value of the product supplied toward SBE goals.

To be counted, the SBE vendor / supplier must be engaged in selling the product in question to the public. This is important in distinguishing an SBE vendor / supplier, which has a regular trade with a variety of customers, from a firm which performs supplier-like functions on an ad hoc basis or for only one or two contractors with whom it has a special relationship.

A supplier of bulk goods may qualify as an eligible SBE vendor / supplier if it either maintains an inventory or owns or operates distribution equipment. With respect to the distribution equipment; e.g., a fleet of trucks, the term "operates" is intended to cover a situation in which the supplier leases the equipment on a regular basis for its entire business. It is not intended to cover a situation in which the firm simply provides drivers for trucks owned or leased by another party; e.g., a prime contractor, or leases such a party's trucks on an ad hoc basis for a specific job.

If the commercially useful function being performed is not that of a qualified SBE vendor / supplier, but rather that of delivery of products, obtaining bonding or insurance, procurement of personnel, acting as a broker or manufacturer's representative in the procurement of supplies, facilities, or materials, etc., only the fees or commissions will apply towards the goal.

For example, a business that simply transfers title of a product from manufacturer to ultimate purchaser; e. g., a sales representative who re-invoices a steel product from the steel company to the Contractor, or a firm that puts a product into a container for delivery would not be considered a qualified SBE vendor / supplier. The Contractor would not receive credit based on a percentage of the cost of the product for working with such firms.

Concerning the use of services that help the Contractor obtain needed supplies, personnel, materials or equipment to perform a contract: only the fee received by the service provider will be counted toward the goal. For example, use of a SBE sales representative or distributor for a steel company, if performing a commercially useful function at all, would entitle the Contractor receiving the steel to count only the fee paid to the representative or distributor toward the goal. This provision would also govern fees for professional and other services obtained expressly and solely to perform work relating to a specific contract.

Concerning transportation or delivery services: if an SBE trucking company picks up a product from a manufacturer or a qualified vendor / supplier and delivers the product to the Contractor, the commercially useful function it is performing is not that of a supplier, but simply that of a transporter of goods. Unless the trucking company is itself the manufacturer or a qualified vendor / supplier in the product, credit cannot be given based on a percentage of the cost of the product. Rather, credit would be allowed for the cost of the transportation service.

The City is aware that the rule's language does not explicitly mention every kind of business that may contribute work on this project. In administering these programs, the City would, on a case-by-case basis, determine the appropriate counting formula to apply in a particular situation.

2.2 Contract Compliance

Questions concerning the SBE Program shall be directed to the Contract Compliance Officer of the City of Madison Department of Civil Rights, Affirmative Action Division, 210 Martin Luther King, Jr. Blvd., Room 523, Madison, WI 53703; telephone (608) 266-4910.

2.3 Certification of SBE by City of Madison

The Affirmative Action Division maintains a directory of SBEs which are currently certified as such by the City of Madison. Contact the Contract Compliance Officer as indicated in Section 2.2 to receive a copy of the SBE Directory or you may access the SBE Directory online at www.cityofmadison.com/dcr/aaTBDDir.cfm.

All contractors, subcontractors, vendors and suppliers seeking SBE status must complete and submit the **Targeted Business Certification Application** to the City of Madison Affirmative Action Division by the time and date established for receipt of bids. A copy of the Targeted Business Certification Application is available by contacting the Contract Compliance Officer at the address and telephone indicated in Section 2.2 or you may access the Targeted Business Certification Application online at www.cityofmadison.com/dcr/aaTBDDir.cfm. Submittal of the Targeted Business Certification Application by the time specified does not guarantee that the applicant will be certified as a SBE eligible to be utilized towards meeting the SBE goal for this project.

2.4 Small Business Enterprise Compliance Report

2.4.1 Good Faith Efforts

Bidders shall take all necessary affirmative steps to assure that SBEs are utilized when possible and that the established SBE goal for this project is achieved. A contractor who self performs a portion of the work, and is pre-qualified to perform that category of work, may subcontract that portion of the work, but shall not be required to do so. When a bidder is unable to achieve the established SBE goal, the bidder must demonstrate that a good faith effort to do so was made. Such a good faith effort should include the following:

- 2.4.1.1 Attendance at the pre-bid meeting.
- 2.4.1.2 Using the City of Madison's directory of certified SBEs to identify SBEs from which to solicit bids.
- 2.4.1.3 Assuring that SBEs are solicited whenever they are potential sources.
- 2.4.1.4 Referring prospective SBEs to the City of Madison Affirmative Action Division for certification.
- 2.4.1.5 Dividing total project requirements into smaller tasks and/or quantities, where economically feasible, to permit maximum feasible SBE participation.
- 2.4.1.6 Establishing delivery schedules, where requirements permit, which will encourage participation by SBEs.
- 2.4.1.7 Providing SBEs with specific information regarding the work to be performed.
- 2.4.1.8 Contacting SBEs in advance of the deadline to allow such businesses sufficient time to prepare a bid.
- 2.4.1.9 Utilizing the bid of a qualified and competent SBE when the bid of such a business is deemed reasonable (i.e. 5% above the lowest bidder), although not necessarily low.
- 2.4.1.10 Contacting SBEs which submit a bid, to inquire about the details of the bid and confirm that the scope of the work was interpreted as intended.
- 2.4.1.11 Completion of Cover Page (page C-6), Summary Sheet (page C-7) and SBE Contact Reports (pages C-8 and C9) if applicable.

2.4.2 Reporting SBE Utilization and Good Faith Efforts

The Small Business Enterprise Compliance Report is to be submitted by the bidder with the bid: This report is due by the specified bid closing time and date. Bids submitted without a completed SBE Compliance Report as outlined below may be deemed non-responsible and the bidder ineligible for award of this contract. Notwithstanding any language to the contrary contained herein, the City may exercise its discretion to allow bidders to correct or supplement submissions after bid opening, if the minor discrepancy, bid irregularity or omission is insignificant and not one related to price, quality, quantity, time of completion, performance of the contract, or percentage of SBE utilization.

2.4.2.1 If the Bidder meets or exceeds the goal established for SBE utilization, the Small Business Enterprise Compliance Report shall consist of the following:

- 2.4.2.1.1 **Cover Page**, Page C-6; and
- 2.4.2.1.2 **Summary Sheet**, C-7.

2.4.2.2 If the bidder does not meet the goal established for SBE utilization, the Small Business Enterprise Compliance Report shall consist of the following:

- 2.4.2.2.1 **Cover Page**, Page C-6;
- 2.4.2.2.2 **Summary Sheet**, C-7; and
- 2.4.2.2.3 **SBE Contact Report**, C-8 and C-9. (A separate Contact Report must be completed for each applicable SBE which is not utilized.)

2.5 Appeal Procedure

A bidder which does not achieve the established goal and is found non-responsible for failure to demonstrate a good faith effort to achieve such goal and subsequently denied eligibility for award of contract may appeal that decision to the Small Business Enterprises Appeals Committee. All appeals shall be made in writing, and shall be delivered to and received by the City Engineer no later than 4:30 PM on the third business day following the bidder's receipt of the written notification of ineligibility by the Affirmative Action Division Manager. Postmark not acceptable. The notice of appeal shall state the basis for the appeal of the decision of the Affirmative Action Division Manager. The Appeal shall take place in accordance with Madison General Ordinance 33.54.

2.6 SBE Requirements After Award of the Contract

The successful bidder shall identify SBE subcontractors, suppliers and vendors on the subcontractor list in accordance with the specifications. The Contractor shall submit a detailed explanation of any variances between the listing of SBE subcontractors, vendors and/or suppliers on the subcontractor list and the Contractor's SBE Compliance Report for SBE participation.

No change in SBE subcontractors, vendors and/or suppliers from those SBEs indicated in the SBE Compliance Report will be allowed without prior approval from the Engineer and the Affirmative Action Division. The contractor shall submit in writing to the City of Madison Affirmative Action Division a request to change any SBE citing specific reasons which necessitate such a change. The Affirmative Action Division will use a general test of reasonableness in approving or rejecting the contractor's request for change. If the request is approved, the Contractor will make every effort to utilize another SBE if available.

The City will monitor the project to ensure that the actual percentage commitment to SBE firms is carried out.

2.7 SBE Definition and Eligibility Guidelines

A Small Business Enterprise is a business concern awarded certification by the City of Madison. For the purposes of this program a Small Business Enterprise is defined as:

- A. An independent business operated under a single management. The business may not be a subsidiary of any other business and the stock or ownership may not be held by any individual or any business operating in the same or a similar field. In determining whether an entity qualifies as a SBE, the City shall consider all factors relevant to being an independent business including, but not limited to, the date the business was established, adequacy of its resources for the work in which it proposes to involve itself, the degree to which financial, equipment leasing and other relationships exist with other ineligible firms in the same or similar lines of work. SBE owner(s) shall enjoy the customary incidents of ownership and shall share in the risks and profits commensurate with their enjoyment interests, as demonstrated by an examination of the substance rather than form or arrangements that may be reflected in its ownership documents.
- B. A business that has averaged no more than \$4.0 million in annual gross receipts over the prior three year period and the principal owner(s) do not have a personal net worth in excess of \$1.32 million.

Firm and/or individuals that submit fraudulent documents/testimony may be barred from doing business with the City and/or forfeit existing contracts.

SBE certification is valid for one (1) year unless revoked.

**LAKEVIEW RESERVOIR PIPELINE IMPROVEMENTS PHASE 2
CONTRACT NO. 7452**

Small Business Enterprise Compliance Report

**This information may be submitted electronically through
Bid Express or submitted with bid in sealed envelope.**

Cover Sheet

Prime Bidder Information

Company: _____

Address: _____

Telephone Number: _____ Fax Number: _____

Contact Person/Title: _____

Prime Bidder Certification

I, _____, _____ of
Name Title
_____ certify that the information
Company

contained in this SBE Compliance Report is true and correct to the best of my knowledge and belief.

Witness' Signature

Bidder's Signature

Date

**LAKEVIEW RESERVOIR PIPELINE IMPROVEMENTS PHASE 2
CONTRACT NO. 7452**

Small Business Enterprise Compliance Report

SBE Contact Report

Submit separate copy of this form for each SBE which you are not able to utilize towards meeting the SBE goal for this project. Attach separate sheets if necessary.

SBE Information

Company: _____

Address: _____

Telephone Number: _____

Contact Person/Title: _____

1. Outline below all efforts to solicit a bid from the above SBE. Include date, means of contact, who from your company made this contact and the result.

2. Describe the information provided to the aforementioned SBE regarding the scope of work for which he/she was to provide a bid.

Is this the same scope of work on which the subcontractor you intend to utilize based his/her bid?

Yes No

3. Did this SBE submit a bid? Yes No

4. Is the General Contractor pre-qualified to self-perform this category of work?

Yes No

5. If you responded "Yes" to Question 3, please check the items below which apply and provide the requested detail. If you responded "No" to Question 3, please skip ahead to item 6 below.

The SBE listed above is unavailable for work on this project for the following reasons. Provide specific detail for this conclusion.

The SBE listed above is unqualified for work on this project. Provide specific details for this conclusion.

The SBE listed above provided a price that was unreasonable (i.e. more than 5% above the lowest bidder). Provide specific detail for this conclusion including the SBE's price and the price of the subcontractor you intend to utilize.

A contract with the SBE listed above may constitute a breach of the bidder's collective bargaining agreements. Provide specific detail for this conclusion including, but not limited to, correspondence from the SBE indicating it will not sign a project labor agreement and/or correspondence from the applicable trade union indicating a project labor agreement will not be allowed at the time of project bidding.

Other; please specify reason(s) other than listed above which made it impossible for you to utilize this SBE on this project.

6. Describe any other good faith efforts:

SECTION D: SPECIAL PROVISIONS

LAKEVIEW RESERVOIR PIPELINE IMPROVEMENTS PHASE 2 CONTRACT NO. 7452

It is the intent of these Special Provisions to set forth the final contractual intent as to the matter involved and shall prevail over the Standard Specifications and plans whenever in conflict therewith. In order that comparisons between the Special Provisions can be readily made, the numbering system for the Special Provisions is equivalent to that of the Specifications.

Whenever in these Specifications the term "Standard Specifications" appears, it shall be taken to refer to the City of Madison Standard Specifications for Public Works Construction and Supplements thereto.

SECTION 102.12: BEST VALUE CONTRACTING

This Contract shall be considered a Best Value Contract if the Contractor's bid is equal to or greater than \$59,000 for a single trade contract; or equal to or greater than \$288,000 for a multi-trade contract pursuant to MGO 33.07(7).

ARTICLE 104 SCOPE OF WORK

Work under this contract includes, but is not limited to, the installation of water main and storm sewer, clearing and grubbing, earthwork, paving, resurfacing and street restoration, landscape restoration, removal and rebuilding a portion of an existing stone wall and construction of a geo-textile retaining wall. Additionally, work under this contract generally includes mobilization, erosion control and traffic control.

Work is to be performed in two general areas:

- Location 1: the southern portion of the work occurs primarily within Dane County's Lake View Hill Park which, in addition to serving as a public park, also houses the Dane County Human Services building complex and County maintenance facilities. Work in this area also extends to the City of Madison right-of-ways at the west end of Lake View Avenue and at the intersection of Esch Lane and Longview Street. A portion of the proposed main at Esch Lane and Longview Street is through an easement on private property as is a portion of the proposed main at the west end of Lake View Avenue.
- Location 2: the northern portion of the work occurs in City right-of-way on Melby Drive between Mandrake Road and Northview Drive and on Mandrake Road between Reinke Dr and Northland Drive.

The Contractor shall view the site prior to bidding to become familiar with the existing conditions. It will be the responsibility of the Contractor to work with the utilities located in the project limits to resolve conflicts during the construction process.

SECTION 104.4 INCREASED OR DECREASED QUANTITIES

It is agreed and understood that the quantities of any items of work shown on the plans or in the proposal are subject to increase or decrease during the progress of the work. The Engineer reserves the right to increase or decrease the quantities of any items of work, including increase or decrease of quantities by alteration of plans, as may be considered necessary or desirable during the progress of the work to satisfactorily complete the project. Such increases or decreases in quantities shall not be considered as a waiver of any conditions of the contract nor invalidate any of the provisions thereof. All terms of Section 104.5 Increase Items and Section 104.6 Decreased and Deleted Items of the Standard Specifications for Public Works Construction are applicable to this project.

SECTION 104.10 CLEANING UP

Excess concrete from finishing operations and from spillage on adjacent sidewalk and curb & gutter shall be removed immediately. Excess concrete or mortar from the finishing operation and spillage into SASs and inlets shall be removed immediately.

SECTION 105.12 COOPERATION BY THE CONTRACTOR

It is anticipated that the Contractor will need to use multiple crews in order to complete the work under this contract by the interim and final completion dates. Some weekend work is required to limit impacts to Dane County. It is also expected that the separated work locations will require multiple mobilizations.

Madison Water Utility is aware of three other projects that may be taking place in the same vicinity and at the same time as this project. Final completion of work related to City of Madison Contract 7339 Lakeview Reservoir Reconstruction is expected to be completed by the end of June 2017. Cellular providers may also be working concurrently to relocate their equipment from a temporary monopole back to the reservoir.

Work on City of Madison Contract 7880 Lakeview Reservoir Landscaping is expected to begin in late April. This work will occur in the area immediately adjacent to the reservoir. Landscaping is scheduled to be completed by June 1st but the landscaping contractor will have on-going establishment and maintenance work throughout the 2017 growing season.

Dane County may also have a contractor performing landscaping adjacent to the nurse's dorm memorial and completing the stormwater management project that includes a series of basins connected by channels. The stormwater basins and channels and the nurse's dorm memorial are immediately west of the proposed 16-in water main, grading and stone wall work on County property north of Northport Drive.

Exercise care around existing trees, plantings, fences, walls, steps, driveways, stormwater management facilities and all other structures and amenities, both on Dane County and private property and City right-of-way. Damage to any items during construction shall be repaired or replaced at the Contractor's expense. All standard tree protection specifications will be strictly enforced.

The southern project site (Location 1) is mostly located in County-owned Lake View Hill Park. The western-most portion of the property is home to Dane County Human Services. Other buildings in the complex are used by Dane County Building and Maintenance staff. There are two interconnected access drives to the site, one off Lake View Avenue and another off Northport Drive. There is significant vehicular and pedestrian movement throughout the larger site area throughout the day. County staff uses both drives to access and move through the site, park vehicles and walk between parking areas and buildings. Both drives are used by the public to visit Human Services and the Park. In addition, Madison Water Utility staff visit and perform short-duration work at the reservoir and the booster station daily, and more extensive work occasionally.

Use the Lake View Avenue access drive or the construction entrance off Northport Drive to reach the Lake View Hill Park work site – DO NOT use the County access drive off Northport Drive. Do not block vehicle or pedestrian access into or through the Dane County property except with a minimum of five working day prior notice to Dane County and Madison Water Utility.

Contact Greg Brockmeyer, Dane County Director of Facilities & Services, a minimum of five working-days prior to all blockages to any Dane County parking lot, access drive, facility or building.

- Primary Contact: Greg Brockmeyer, (608) 628-6832 (mobile)
- Secondary Contact: Amanda DePagter, (608) 266-4350 (office)
- Madison Water Utility Contact: MWU Construction Inspector

Work and staging is only allowed in designed areas in either permanent or temporary easements. Do not park equipment or stage in any area except as noted in the plans (see the Contractor Use sheets). Protect any temporary earth, soil or spoils piles from erosion by encircling with silt fence or other appropriate erosion control products.

SECTION 107.1 PUBLIC CONVENIENCE AND SAFETY

The Contractor shall properly barricade and light all work areas. Sidewalk forms, form pins and other items incidental to the work shall not be left or stored on the sidewalk or in the sidewalk area.

The contractor shall not be allowed to remove curb and gutter from both sides of the street at the same time unless approved by the Engineer. This is in order to minimize the amount of on street parking required by property owners within any given block at the same time.

If sidewalk exists on both sides of any given block, the Contractor shall complete all repairs and reopen the sidewalk on one side of the block before beginning repairs on the opposite side of the block.

The Contractor shall backfill along both sides of the newly poured sidewalk immediately following removal of the sidewalk forms.

SECTION 107.2 PROTECTION AND RESTORATION OF PROPERTY AND PROPERTY OWNERS

Care shall be taken not to disturb property irons, sod areas and retaining walls on private property. Sidewalk forms, form pins and other items incidental to the work shall, at no time, be placed on private property. The Lake View Hill Park sign off Northport Drive shall be protected with orange construction fencing for the duration of work in the area. Protection of the sign shall be incidental to other work in the contract.

SECTION 107.6 DUST PROOFING

The Contractor shall take all necessary steps to control dust arising from operations connected with this contract. When ordered by the Engineer, the Contractor shall dust proof the construction area by using power sweepers and water. Dust proofing shall be incidental with operations connected with this contract.

SECTION 107.7 MAINTENANCE OF TRAFFIC

All signing and barricading shall conform to Part VI of the Federal Highways Administrations "Manual on Uniform Traffic Control Devices" (MUTCD), the State of Wisconsin Standard Facilities Development Manual (including Chapter 16 – Standard Detail Drawings) and the City of Madison Standards for sidewalk and bikeway closures.

A flagger shall be used when work is being done on Esch Lane or Longview Street. One travel lane at least 10 feet wide shall be provided for traffic.

Notice shall be given to the residents on Lake View Avenue 48 hours before any work is done that would obstruct their driveways.

A construction entrance will be present off of Northport Drive. Signage shall be provided on Northport Drive to let drivers know of the change to the traffic pattern. There shall also be signage alerting bicyclists of the construction entrance and to watch for trucks entering the work zone. The bike lane on Northport Drive shall be swept daily to prevent loose gravel and any construction materials from impacting bicyclists.

The work on Mandrake Road and Melby Drive shall be done under a full closure to through traffic. Local traffic shall be allowed. Barricades with signage alerting drivers to the closure shall be placed at the end of the project limits.

Traffic Control shall be measured as a lump sum. Payment for the Traffic Control is full compensation for constructing, assembling, hauling, erecting, re-erecting, maintaining, restoring, and removing non permanent traffic signs, drums, barricades, and similar control devices, including arrow boards, for providing, placing, and maintaining work zone. Maintaining shall include replacing damaged or stolen traffic control devices. Temporary pavement markings and electronic message boards shall be paid for as separate bid items. Traffic control to install temporary or permanent pavement markings shall be included in the Traffic Control Lump Sum Bid Item.

Contractor shall supply all necessary mounting hardware and supports for signing. This shall also include covering and uncovering any conflicting overhead signs during the project. Contractor shall display all signing so as to be easily viewed by all users. Contractor shall mount traffic control on posts or existing poles or drive posts whenever possible. Existing poles may be used with approval of Construction Engineer. Contractor shall inspect traffic control daily to ensure all traffic control remains in place during the project.

The traffic control plan may need to be altered as conditions change in the field or as unexpected conditions occur. This shall include relocating existing traffic control or providing additional traffic control. This should be considered incidental to providing traffic control for the project.

Type A warning lights shall be installed on all barricades used in the project per State of Wisconsin S.D.D. 15C2-4B. Contractor shall also place Type C warning lights on any barrels used to taper traffic or lane closures.

All temporary inlet or structure plating for traffic control phasing shall be considered incidental to the traffic control bid item.

Contractor shall place portable changeable message boards at least one week in advance of the start of work, notifying the public of the start of construction. Contractor shall locate the portable changeable message boards as directed by the Engineer.

Contractor shall notify the City of Madison Police Department, Fire Department, Madison Metro, and Traffic Engineering 48 hours in advance of all switchovers of traffic lanes and closures of streets. Notifications must be given by 4:00 P.M. on Thursday for any such work to be done on the following Monday. Notify Madison Metro one week prior to traffic switches, street closures, and reopening the road to through traffic for bus routing. Madison Metro contact is Tim Sobota (608) 261-4289.

Maintain sidewalk at all times on one side of the street at all times and both sides whenever possible on Mandrake Road and Melby Drive. Sidewalk shall be maintained on both sides at all times on Northport Drive. If sidewalk must be closed for construction purposes, contractor shall ensure that sidewalk on opposite side of the street is open. Sidewalk closures shall be signed at the crosswalks prior to the closure. Sidewalk access to all businesses shall remain open from at least one end of a block at all times. Sidewalks shall be fully open during non-working hours except where necessary to enable sidewalk to cure. In areas of sidewalk construction, provide a temporary surface for pedestrian access at all times. The temporary surface shall meet Americans with Disabilities Act Accessibility Guidelines (ADAAG) requirements and shall consist of temporary asphaltic surface, any grade of concrete, skid resistant steel plating, or alternative material as approved by the Construction Engineer. Gravel or base course material is not acceptable. Maintaining Sidewalk is considered incidental to the contract.

Construction equipment and materials are not to be stored within the street right-of-way that is open to traffic during non-working hours.

Contractor is responsible for obtaining and installing temporary no parking signs to facilitate traffic control plan or as necessary to complete the work within the contract. The contractor shall contact John Villareal with the City of Madison Parking Utility (608-267-8756) at least 3 working days prior to needing the signs.

Contractor shall post signs in accordance with the City of Madison Police Department Guidelines for temporary no parking restrictions for construction or special events. The guidelines can be found at the link listed below. This shall be considered incidental to the traffic control lump sum bid item.

http://www.cityofmadison.com/business/pw/documents/guidelines_temporarynoparkingrestrictions.pdf

The Contractor shall not remove traffic signs. For removal or replacement of traffic and parking signs, contact the City of Madison Traffic Engineering Field Operations, 1120 Sayle Street, 266-4767, 8:00 a.m. to 4:00 p.m., a minimum of 2 working days in advance of when any existing signs need to be removed. This service is provided free of charge. If the contractor removes the signs, the contractor will be billed for the reinstallation of, and any damage to, the signing equipment. The contractor shall notify The City of Madison Traffic Engineering Field Operations, 1120 Sayle Street, 266-4767 upon completion of final landscaping to have permanent signs reinstalled. The contractor shall expect a minimum of seven working days to have permanent signs reinstalled. The contractor shall leave in place all necessary traffic control until given notice by the construction engineer that permanent signing is in place and temporary traffic control may be removed.

Contact Jeremy Nash, City of Madison Traffic Engineering, at 266-6585 for questions on this spec.

SECTION 107.15 TREE PROTECTION

City of Madison tree protection specifications shall apply and be strictly enforced in all work areas including Dane County property and private property except for those trees identified as being removed. Individual fencing of trees identified in the plans shall mark tree protection zones of no disturbance and be paid under Bid Item #90006.

SECTION 108.2 PERMITS AND LICENSING

The City of Madison will submit a City of Madison Erosion Control Permit and a DNR WRAPP Water Resources Application for Project Permit (formerly known as Notice of Intent (NOI)) to obtain coverage under a Construction Site General Permit.

The Contractor shall meet the conditions of the permits by properly installing and maintaining the erosion control measures shown on the plans, specified in these Special Provisions, or as directed by the Construction Engineer or designees. This work will be paid for under the appropriate contract bid items or, if appropriate items are not included in the contract, shall be paid for as Extra Work. A copy of the permit will be available at the Madison Water Utility, 119 E. Olin Ave., Madison, WI.

This permit covers trench dewatering to a maximum of 70 gallons/minute from the project, provided appropriate control measures are in place. The City's obtaining this permit is not intended to be exhaustive of all permits that may be required to be obtained by the Contractor for construction of this project. It shall be the responsibility of the Contractor to identify and obtain any other permits needed for construction.

The Contractor shall refer to section 210.6 Erosion Control Implementation and Enforcement for additional information on the requirements regarding this topic.

SECTION 109.2 PROSECUTION OF WORK

The Contractor shall begin work on or before May 29, 2017. The date of completion shall be September 29, 2017. The Contractor shall be required to complete the work in the time frame provided and under the restrictions outlined in these provisions.

Work shall begin only after the start work letter is received. If it is desirable to begin work on other than above-mentioned date, the Contractor shall establish a mutually acceptable date with Madison Water Utility.

The proposed 12-in Esch Lane water main connection (Sheet W-4) shall be installed, successfully tested and put into service no later than June 30, 2017. Note that required sequencing of water main installations necessitate that this connection be in service prior to other water main operations being performed. See Section 703 of these special provisions for details.

All work on the southern portion of the work (Location 1) including all restoration, cleanup and demobilization, shall be completed by September 1, 2017. The contractor may access Dane County property after September 1, 2017 on an as-needed basis to water seeded areas, re-seed as required, inspect, maintain or remove erosions controls, make required repairs or complete warranty work.

ARTICLE 201 EXCAVATION CUT

Removal and proper disposal of the entire existing hard-surface trail adjacent to the stone wall shall be incidental to the excavation cut in this area.

SECTION 210.1(d) STREET SWEEPING

When required, either by the erosion control plan or the Construction Engineer, the Contractor shall perform mechanical street sweeping on all streets or paved surfaces affected by construction equipment, hauling or related construction activities that result in mud tracking or siltation. Mechanical street sweeping shall be completed as directed by the Construction Engineer and shall remove all loose material to the satisfaction of the Construction Engineer. Depending on site conditions, construction activities, and hauling methods utilized by the Contractor mechanical street sweeping may be required multiple times throughout the day with an absolute minimum that all streets are clean at the end of the work day. Areas not accessible by mechanical street sweepers may require hand scraping with shovels.

SECTION 210.6 EROSION CONTROL IMPLEMENTATION AND ENFORCEMENT.

Timely action regarding the maintenance of erosion control practices is critical to compliance with the City of Madison's land disturbance permits as issued both by the WDNR and the City. To allow the City to be assured of compliance with these permits, and federal, state and local laws, the Contractor shall be required to proceed in the following manner with regard to the maintenance of these practices.

In the event an erosion control practice is determined by the Engineer or their designee to require maintenance, or if the terms of the erosion control permit are not being met, the Engineer shall order the Contractor, in writing, to maintain the erosion control practice/device or comply with the terms of the permit. The contractor shall have forty eight (48) hours to complete that work and provide documentation that it has been completed to the Engineer.

Failure to complete the work within the forty eight (48) hours shall result in any or all of the following actions by the Engineer:

1) The Contractor shall be charged one (1) day of liquidated damages for failure to complete the work during the ordered timeframe and an additional day of liquidated damages for each twenty four (24) hour period that passes after the initial forty eight (48) hours during which time the ordered work is not completed.

2) At the Engineer's discretion, the work ordered may be completed by City Forces. In this case, the Contractor shall be charged the liquidated damages as described in 1 above and shall be charged the full cost of City Forces responding to complete the ordered work.

3) At the Engineer's discretion, work on the project as a whole may be suspended under Section 109.6 until such time as the Contractor completes the originally ordered work. In this case, the Contractor shall still be charged liquidated damages as described in 1 above. Additionally, days of work will continue to be charged during the suspension of work. If this results in the Contractor failing to complete the project within the allotted contract time then additional liquidated damages shall be charged.

Notwithstanding the foregoing, the failure to comply with an order under this Section may constitute a default under Section 109.10.

The Engineer's decision under this Section may be reviewed under Section 105.2.

ARTICLE 500 SEWERS AND SEWER STRUCTURES

The sewer designer for this project is Eric Dundee. He may be contacted at (608) 266-4913 or edundee@cityofmadison.com.

STORM SEWER AND STRUCTURES GENERAL

Storm sewer pipe work shall include installing approximately 400 lineal feet of new 12" RCP storm sewer at locations shown on the plan and in accordance with these specifications.

Reconnection of existing pipes at new or existing structures, or new pipes at new or existing structures, shall be considered to be part of the work required to construct the new structure or to construct the new sewer pipe and shall not be rewarded with additional compensation. However, if the structure being removed is larger than the new structure, thus requiring additional pipe, the new pipe shall be paid under the appropriate bid item and the connection of the old pipe to the new pipe shall be accomplished with a concrete collar.

Where a new structure is to be constructed at an existing pipe, it is expected that the contractor shall saw cut the existing pipe in the required location to accommodate the placement of the new structure. If the contractor for his or her convenience deems it more suitable to remove the existing pipe to a full joint, the additional pipe and concrete collar required to reconnect to the new structure shall be the contractor's responsibility and shall not be compensated.

Precast structures are only allowed where field poured structures are not specifically called for, and no precast structures are allowed until ULO's are completed and approval of the design engineer has been received.

SECTION 701 PROVISIONS FOR WATER INSTALLATION AND ABANDONMENT

The water designer for this project is Kelly Miess. She may be contacted at (608) 261-9640 or kmiess@madisonwater.org.

The project consists of furnishing and installing new ductile iron water main and fittings in support of the newly constructed Lakeview Reservoir located in the Dane County's Lake View Hill Park and Human Services and Maintenance complex. Water main installation is planned in three areas:

1. Northport Drive to Lake View Ave: Proposed water main ties into existing main off Northport Drive at the southeast property corner of the Dane County Human Services/ Lake View Hill Park property and continues north then east to tie into the Madison Water Utility booster station near the west end of Lake View Avenue then east out to connect to existing main at the west dead end of Lakeview Avenue (Location 1).
2. Esch Lane Connection: Proposed water main ties into existing main in the northeast Dane County Human Services/Lake View Hill Park parking lot. From there it continues east through the parking lot and a wooded area, then northeast through an easement on private property to connect to existing main at the Esch Lane and Longview Street intersection (Location 1).
3. Melby/Mandrake: Proposed water is to be installed on Mandrake Road from Northland Drive to Reinke Drive. A dual main installation on Melby Drive from Mandrake Road to Northview Drive includes a new main in the south corridor and a replacement-in-place of the existing main on Melby Drive (Location 2).

The project also includes abandoning existing water main including water valves and hydrants. Once the new systems have passed the pressure and water quality tests, cut off, extend as necessary, and reconnect the existing water service laterals to the new water mains unless the service is to be abandoned. All services that may require relocation due to conflicts with trees or any other issue must be authorized and the new location approved in advance by the Water Utility inspector. Any broken curb stops, buried curb boxes or otherwise dysfunctional service components must be approved for adjustment, removal and/or replacement by the Water Utility inspector in advance of any work being performed.

Water Service Outage Special Notification Requirements:

- **Contact Greg Brockmeyer, Dane County Director of Facilities & Services, a minimum of two working-days prior to all service outages to any Dane County facility or building.**
 - Primary Contact: Greg Brockmeyer, (608) 628-6832 (mobile)
 - Secondary Contact: Amanda DePagter (608) 266-4350 (office)
- Contact the Madison Water Utility Inspector a minimum of one week prior to taking the existing main on Melby Drive out of service to allow for the installation of a temporary bypass system serving affected customers. See “Required Water Main Installation Sequencing for Melby & Mandrake Water Mains” in Section 703 of these special provisions for further details.

Water Service Outage Restrictions for Dane County:

Service outages to any Dane County facility or building may only occur on Saturday or Sunday.

Take all necessary precautions to protect newly installed main as well as the existing Madison Water Utility system and ensure its proper functioning during construction.

View the sites prior to bidding and become familiar with existing conditions and utilities.

SECTION 702 MATERIALS

Furnish all materials, labor and equipment necessary to complete this project except the tapping sleeves, tapping valves and tapping valve boxes. Water Utility will furnish the tapping sleeves, tapping valves, tapping valve boxes, and the crew to perform the taps.

SECTION 703 CONSTRUCTION METHODS

Perform all work in accordance with these provisions and the City of Madison Standard Specifications, current edition. Keep all valves accessible and functioning throughout the duration of the work or as directed otherwise by the Water Utility representative.

Required Water Main Installation Sequencing for Zone 5 Mains:

Lakeview Reservoir is a dual-tank, dual-zone reservoir that serves Madison Water Utility’s Pressure Zones 5 and 6 (see Sheet W-16). The upper tank serves the higher-pressure Zone 5 and the lower tank serves the lower-pressure Zone 6. Zone 6 is large and served from several facilities located throughout the zone. Zone 5, however, is a small pressure zone with the upper tank and the adjacent booster station serving as the sole source of water for the entire zone. Currently, the existing 12-in main from the reservoir to the booster station is the only pathway for water to enter Zone 5. Given this situation, the sequencing of construction operations will be critical to minimize water service outages to Dane County and other Zone 5 Water Utility customers. Perform the connections affecting Zone 5 below in the following sequence:

1. Install and have actively in service, the proposed 12-in Esch Lane water main connection as shown on Sheet W-4. Note that this connection is required to feed Pressure Zone 5 and County services during the subsequent operations in this sequence.
2. Perform the cut-in connection to the 12-in Zone 5 main west of the booster station (Sheet W-11, WN23). Install and successfully disinfect and pressure test the main from the cut-in location, east

to the proposed valve at Station 21+00± and west to the temporary flushing hydrant at Station 20+05± (Sheet W-3). Ensure that the isolation valve configuration will maintain service to the County during this step in the sequence.

3. Tie the new Zone 5 main from Step 2 into the County services (WN22, Sheet W-11). Meet the requirements for notification and service outage restrictions detailed in Section 701 of these special provisions.
4. Make the cut-in connection to the existing water main at the west end of Lakeview Ave (WN27, W-12). Install and successfully disinfect and pressure test the main from the cut-in location, north and west to the temporary flushing hydrant at Station 21+30± (Sheet W-3).
5. Tie into the existing Zone 5 piping at the exterior of the Lakeview Booster Station (WN26, Sheet W-11).

Any alternate sequencing must be approved by the engineer in writing prior to beginning work on any of the above operations.

Required Water Main Installation Sequencing for Melby & Mandrake Water Mains:

Work under this contract includes the installation of new 8-inch water main on Melby Drive and Mandrake Road. The installation on Mandrake Road is a replacement of the existing 6-inch water main between Northland Drive and Reinke Drive. The installation on Melby Drive includes two new mains between Mandrake Road and Northview Drive. The proposed main in the north corridor is a replacement-in-place of the existing 6-in water main. The proposed main in the south corridor is a new dual main for future pressure zone expansion. Four properties are served off the existing 6-in main on Melby Drive between Mandrake Road and Northview Drive. In order to maintain service to these customers during the replacement of the existing Melby main, follow the sequence of operations below:

1. Install and have in service the portion of proposed water main on Mandrake Road that includes the proposed hydrant at the intersection of Mandrake Road and Melby Drive. This hydrant will feed a temporary bypass system to the customers at 1106, 1110 and 1114 Melby Drive. Note that the property at 1109 Melby Drive will be served from a system fed by the existing hydrant at the intersection of Melby Drive and Northview Drive. See Sheet W-15.
2. A minimum of one week prior to disrupting service to the customers on Melby Drive, contact the Madison Water Utility Construction Inspector to request that the bypass system be installed to serve the four properties on Melby Drive. Madison Water Utility staff will install, maintain and remove the temporary bypass system.
3. Ensure the temporary bypass system is installed and in service before performing any work that will affect the customers on the temporary system.
4. Install and put into service the proposed north-corridor water main on Melby Drive. Before returning Melby Drive services to the new north-corridor main, either have the proposed south-corridor main installed or ensure that once returned to service off the new north-corridor main, customers will not require additional service outages to install the south-corridor main.
5. Reconnect the four services on Melby Drive to the north-corridor main.
6. Contact the Madison Water Utility Construction Inspector to request that the bypass system be removed.

Any alternate sequencing must be approved by the engineer in writing prior to beginning work on any of the above operations.

Incidental Work to Water Main Installation

The following items are incidental to water main installation. Remove and properly dispose of the removed material as required to install proposed water main at no additional cost to the City:

1. Removal and proper disposal of the existing north–corridor water main on Melby Drive (Sheet W-7).
2. Removal and proper disposal of the former nurse's dorm foundation (Sheet W-2). The former nurse's dorm was almost completely demolished and reconstructed as an outdoor memorial. During the reconstruction, the foundation of the dorm was removed to approximately three feet below existing grade. The location of the foundation is identified on Sheet W-2 between Stations 18+00 and 19+00.

Existing Conduits Adjacent to Existing Mains

Note that four connections will be made to the existing 12-inch and 16-inch water mains that run from the booster station to the reservoir. There are two (2) fiber optic conduits parallel and just west of these mains as shown in Detail D1-1. Repair any damage to the conduits or the fiber at no additional expense to the City.

WATER UTILITY GENERAL NOTES FOR SPECIFIC WORK:

WN1	Replace the existing lead service with a new copper service.
WN2	Extend and reconnect the existing copper service to the new water main.
WN3	Existing service to be abandoned when water main is cut-off.
WN4	Disconnect service from the old water main and reconnect the existing copper water service lateral to the new water main.
WN5	Relocate the existing fire hydrant.
WN6	Abandon water valve access structure.
WN7	Furnish and install the new top section for the water access structure.
WN8	Abandon the valve box.
WN9	Furnish the ditch, compaction and all materials and labor for the installation of new service lateral.
WN10	Remove and salvage existing hydrant.
WN11	Replace the existing copper service with a new copper service.
WN20+	See Water Impact Plan for connection point isolation and water shut-off notification information.

BID ITEM 90001 CONSTRUCT GEO-TEXTILE RETAINING WALL

Description

This bid item includes all work, materials, labor, equipment and incidentals required to install the geo-textile retaining wall as described in the plans and these special provisions.

The geo-textile wall consists of successive layers of geotextile fabric anchored by placing fill retained at the face by extending the fabric over a removable form brace and re-embedding the remaining fabric back into the select fill.

Materials

Fill: Provide free-draining aggregate such as washed gravel or clear stone. Native excavated material may not be used.

Geo-textile Fabric: Provide a non-woven geo-textile with a minimum ultimate strength of 2520 lb/ft, a minimum ultraviolet (UV) Stability of 70 percent and a minimum permeability of 0.08 ft./min. During

shipment and storage, keep the geotextile dry and wrapped in UV resistant material capable of protecting it from damage from sunlight and other elements.

Construction

Prior to geo-textile wall construction, grade the foundation soils supporting the wall to a level uniform condition and compacted such that it is free from ruts and protruding objects such as rocks or sticks for a width equal to the length of the geotextile reinforcement as shown in the plan set.

Begin wall construction at the lowest level of the wall. Place each layer horizontally as shown in the plans. Unroll the geotextile in the direction perpendicular to the wall face. Ensure that no slack or wrinkles exist in the geotextile prior to select fill placement. Place the fill onto the geo-textile in a manner that does not distort or distress the fabric. Drop the fill onto the fabric from a distance of no more than 4.5 feet. Do not end-dump fill from trucks directly onto the fabric. Ensure a minimum of 6 inches of fill material is present between the geotextile and any equipment tires or tracks. Do not allow sudden turning of equipment on the fill to prevent damage or distortion to the fabric. Install geotextile per manufacturer's recommendations. Repair or replace damaged geo-textile fabric at no additional cost.

Refer to plan sheets RW-1, RW-2 and the details on Sheet D-1 and D-3 for the following construction procedure:

- Step 1: Place L-shaped form(s) of a height slightly greater than the lift thickness on the surface along the wall face.
- Step 2: Unroll the geo-textile in place with the overlap end extending over the top of the form. Backfill approximately three-fourths of the lift thickness and compact. Do not compact within one to two feet of the wall face.
- Step 3: Make a windrow one to two feet from the wall face and fold the overlap end of the geo-textile into the windrow. Backfill and compact the remaining lift thickness.
- Step 4: Repeat Steps 1-3 until the planned height is reached. The overlap length of the top lift must be a minimum of six feet with no seams or overlap on the wall face.

Note that the first four lifts will have overlapping fabric pieces, one forming a south face and one forming an east face. Ensure the wall corner face is completely encased in fabric.

For further information, refer to *Design and Construction of Low Cost Retaining Walls* (Colorado Transportation Institute, 1994); available at the following link: <https://www.codot.gov/programs/research/pdfs/1994-research-reports/retainingwalls.pdf>

Method of Measurement

Construct Geo-textile Retaining Wall will be measured in square feet of completed wall face to the nearest square foot. The area will be calculated from the top to the bottom of the wall face at each variation in height along the length of the wall.

Basis of Payment

Construct Geo-textile Retaining Wall shall be paid at the contract bid price which shall be full compensation for all work, equipment, materials and incidentals necessary to install the wall as described above.

BID ITEM 90002 REMOVE & REBUILD STONE RETAINING WALL

Description/General Requirements

This bid item includes all work, materials, labor, equipment and incidentals required to complete the removal, and rebuilding in an alternate location, of a portion of the stone retaining wall as described in the plans and these special provisions.

The existing stone wall is located over and adjacent to the Northport Drive to Booster Station section of water main installation. The wall is located on Dane County property and is part of the larger historic Nurse's Dormitory Memorial. It was built in the late 1920's or early 1930's, presumably to level the

ground for the former Nurse's Dormitory which was located directly north of the wall. No record of the wall's original construction is known to exist.

The work of rebuilding the stone wall must be performed by a contractor who is prequalified with the City of Madison in Pre-Qualification Category 435 Masonry/Tuckpointing.

In addition to Madison Water Utility construction inspection staff oversight, expect Dane County staff to inspect the work at least once before, during and near the completion of the construction of the stone wall.

Photo-Documentation:

Photo documentation is required at specific existing and proposed stone wall site locations as described below. **Submit initial photo documentation of the stone wall removal for review and approval before commencing construction of the replacement stone wall.** Submit final photo documentation of the replacement stone wall reconstruction within 30 days of completion.

Field locate, number and record photo documentation sites on the existing and rebuilt wall. Locate the sites as follows:

- At the north terminus of the wall
- Every 20 feet from the north terminus of the wall along the wall bottom
- At the top edge and the bottom edge of dismantled existing wall
- Prepare an exhibit or marked-up plan sheet showing the location and assigned number of each required site on both the existing and new stone walls.

The site numbering scheme must correspond the location of the existing wall to the proposed wall at approximately the same perpendicular location. Assign numbers to indicate the relationship between the existing wall site and the corresponding site on the proposed wall (e.g. 1A & 1B, 2A & 2B...).

Photograph Requirements:

- Electronic format
- Date stamped
- No less than 900 x 720 pixels per image
- Minimum of two "before" photos per site:
 - Minimum of one wall-face view, in total covering the entire wall face top to bottom.
 - Minimum of one cross-sectional view, in total covering the entire wall cross-section top to bottom.
 - In the cross-sectional photos, include, at a minimum, one image of a standard measuring device at the bottom of the wall and one image of a standard measuring device at the top of the wall to document existing cross-sectional wall thickness.
- Minimum of two "after" photos per site:
 - Minimum of one wall-face view, in total covering the entire wall face top to bottom.
 - Minimum of one cross-sectional view, in total covering the entire wall cross-section top to bottom.
 - In the cross-sectional photos, include, at a minimum, one image of a standard measuring device at the bottom of the wall and one image of a standard measuring device at the top of the wall to document new cross-sectional wall thickness.

Required Submittals

- Photo Documentation:
 - An exhibit or marked-up plan sheet showing the location and assigned number of each required photo documentation site on both the existing and new stone walls.
 - "Before" photographs per above requirements.
 - "After" photographs per above requirements.

Deliver photo documentation submittals electronically by e-mail or hard-copy CD, DVD or USB flash drive to Kelly Miess at kmiess@madisonwater.org or 119 E. Olin Ave. Madison, WI 53713

- Mortar Sample:

Deliver sample to Kelly Miess at 119 E. Olin Ave. Madison, WI 53713. Deliver product specification sheet in hard copy with sample or e-mail to kmiess@madisonwater.org.

- Additional Stone Sample (if required):
Deliver sample to Kelly Miess at 119 E. Olin Ave. Madison, WI 53713. Deliver product specification sheet in hard copy with sample or e-mail to kmiess@madisonwater.org

Materials

Reuse existing stones from the removed section of wall to the extent possible. Additional stones, if required, must be approved by the engineer upon receipt of a representative sample. Source any additional stones locally and match existing stone size and material to the extent possible.

Use Type N mortar and matching, to the extent possible, the color of the existing mortar.

Construction

Dismantle Existing Stone Wall:

Commence dismantling the portion of the existing stone wall identified in the plans only after photo documentation sites are located and recorded. Comply with photo documentation requirements while dismantling the existing wall.

Salvage, Store and Protect Existing Stones:

Salvage all existing stones removed from the existing wall as identified in the plans. Palletize or crate the existing stones in such a manner as to enable their reuse. Transport as needed. Stones may be stored on site in any approved staging area. Take appropriate measures to protect stones from damage.

Protect Existing Wall:

For the time duration between when the wall is first dismantled and when its rebuilding is complete, protect the exposed end of the wall from any damage or unintentional failure. This work may include, but is not limited to protecting the wall and surrounding soil from runoff and erosion, vandalism, or construction activities.

Prior to rebuilding the stone wall, water main installation, grading and installation of the geo-textile retaining wall shall be completed under separate bid items.

Rebuild Stone Wall:

Install the new stone wall per the typical section in the plan set using the salvaged stone. Match the general stone pattern and appearance of the existing wall face at the corresponding photo documentation sites on the new wall. Match the existing cross-sectional widths of the new wall at the corresponding photo documentation sites on the new wall. Blend or taper characteristics gradually if one photo documentation site differs from adjacent sites. Comply with photo documentation requirements while rebuilding the proposed wall.

Install a jig-saw joint at the existing wall connection to the new wall. Alternate existing stones and replacement stones throughout the old-to-new joint length. Carefully select and install replacement stones to create a good fit with the existing stones.

Use Type N mortar and match to the extent possible, the color of the existing mortar. Provide a color sample to the engineer for review and approval. Match the general size of the existing mortar joints of the existing wall face at the corresponding photo documentation sites on the new wall. Where existing mortar has decayed or is no longer visible, provide ¼-inch to ¾-inch mortar joints.

Install 4-in drain tile per the plan set with a minimum 2% slope. Install the drain tile discharge on the down slope face of the wall, extend the pipe to daylight and trim to match grade.

Install the free-draining aggregate between the stone wall and the geo-textile retaining wall.

Where no stone wall exists (for example, in the existing wall where timbers constitute the wall) match the closest up-wall and down-wall cross section and blend to the mid-point. Any alterations to the extent of rebuilt wall must be approved in writing by the engineer before work on any additional extent begins.

Method of Measurement

Remove & Rebuild Stone Retaining Wall shall be measured by square feet, to the nearest half square foot of the face of the successfully completed stone wall.

Basis of Payment

Remove & Rebuild Stone Retaining Wall shall be paid at the contract bid price which shall be full compensation for all labor, equipment, materials and incidentals necessary to dismantle and rebuild the stone wall as described above.

BID ITEM 90003 INSTALL CRUSHED GRAVEL TRAIL

Description

This bid item includes all work, materials, labor, equipment and incidentals required to install the 5-foot wide, 5-inch thick crushed gravel trail as described in the plans and these special provisions. The trail is located in the wooded area approximately centered over the Esch Lane connection section of proposed water main in Location 1. Note that the trail ends at the County property line abutting the private property at 4200 Esch Lane.

Materials

Crushed Gravel: Provide gravel crushed into irregular and angular pieces, composed of granite, limestone or other hard stone meeting the following gradation:

Particle Size	% of Passing
3/8"	100%
#4	90 - 100%
#8	55 - 80%
#16	40 - 70%
#30	25 - 50%
#200	6 - 15%

If the gradation does not meet the minimum 6% passing the #200 sieve, clay fines may be added and mixed with the aggregate to achieve the correct gradation.

Gravel shall be free of all objectionable foreign material including clay clumps, dirt, seeds, twigs or other organic material.

Landscape Fabric: Provide landscape geo-textile fabric with a 4 oz minimum weight, non-woven and permeable.

Construction

Prepare a level and compacted pathway five (5) inches below finished grade and slightly wider than the final width of the path as shown in the plans.

Install landscape fabric under the trail pathway per manufacturer's specifications. Landscape fabric shall not be visible under the crushed gravel and all loose ends shall be cut off, tucked under, or otherwise covered with crushed gravel. Landscape fabric shall be in direct contact with soil.

Apply the crushed gravel. Shape the surface to a 2% cross slope toward the downhill side for drainage. Apply the crushed gravel to a depth necessary to meet the minimum 5-inch compacted thickness.

Perform compaction using either a vibratory plate compactor or a vibratory roller to achieve a minimum compaction rate of 90 percent. Keep the crushed rock moist, but not wet, with a water content of 4% to 5% to achieve the maximum rate of compaction. Backfill the trail edges to create a neat line.

Method of Measurement

Install Crushed Gravel Trail shall be measured by length, in feet, to the nearest half foot along the trail centerline of completed crushed gravel trail.

Basis of Payment

Install Crushed gravel Trail shall be paid at the contract bid price which shall be full compensation for all work, equipment, materials and incidentals necessary to install the crushed gravel trail as described above.

BID ITEM 90004 RESTORE ROCK EMBANKMENT

Description

This bid item includes all work, materials, labor, equipment and incidentals required to remove and reconstruct the small rock embankment along the Dane County/4200 Esch Lane property line adjacent to the Esch Lane water main connection at as described in the plans and these special provisions.

Materials

None required.

Construction

Prior to clearing for the installation of water main, remove the existing rocks in the rock embankment. Store and protect the rocks in an appropriate location. After water main is installed and during the restoration of the area, re-establish the rock embankment at its original location and grade.

Method of Measurement

Restore Rock Embankment shall be measured as a lump sum.

Basis of Payment

Restore Rock Embankment shall be paid at the contract bid price which shall be full compensation for all work, equipment, materials and incidentals necessary to restore the rock embankment as described above.

BID ITEM 90005 SEDIMENT LOG - COMPLETE

Description

Work under this item shall be as be as described in City of Madison Standard Specifications Article 210 for Silt Sock (Bid Item 21024) except as detailed in the plans and these special provisions.

Materials

Provide manufactured 9-inch diameter sediment logs made of excelsior fibers encased in an open-weave containment fabric sealed on both ends. The length of a minimum of 80% of the fibers shall be at least six inches or greater in length. Fibers shall be evenly distributed throughout the diameter and length of the log and shall be seed free. The log flow rate shall be greater than or equal to 35 GPM/SF.

Provide and use wooden stakes a minimum of 1-1/8 inch by 1-1/8 inch by 30-inch.

Construction

Install, maintain and remove sediment log per Wisconsin Department of Natural Resources (WDNR) Conservation Practice Standard 1071: Interim Manufactured Perimeter Control and Slope Intercept Products.

Method of Measurement

Sediment Log – Complete shall be measured by the linear foot to the nearest foot.

Basis of Payment

Sediment Log – Complete shall be paid for at the contract unit price per linear foot, which price shall be full compensation for furnishing all materials; for installation, maintenance, removal and any follow-up restoration; and for all labor, tools, equipment and incidentals necessary to complete the work. Half of the installed quantity shall be paid at the time of installation and the remaining half shall be paid upon removal and any required incidental restoration is completed.

BID ITEM 90006 TREE PROTECTION FENCING

Description

Work under this bid item includes the installation, maintenance and removal of protective temporary construction fencing around specific trees as identified in the plans. This bid item includes furnishing all materials, installation, maintenance, removal and any follow-up restoration; and for all labor, tools, equipment and incidentals necessary to complete the individual tree protection fencing as described.

City of Madison tree protection specifications shall apply and be strictly enforced in all work areas including Dane County property and private property, except for those trees identified as being removed. Individual fencing of trees identified in the plans shall mark tree protection zones of no disturbance.

Materials

Provide minimum four (4) foot tall orange temporary construction fencing with minimum MD tensile strength of 350 lbs/ft and TD tensile strength of 115 lbs/ft.

Provide conventional “T” or “U” metal posts for staking.

Construction

Install temporary construction fencing at a minimum of a 10-foot radius from the outside of the trunk of each tree designated to be protected. Secure fencing with metal stakes spaced six (6) feet on center. Drive stakes a minimum of 18-inches into the ground. Avoid tree roots when driving stakes. Install fencing before beginning construction in the area where trees are to be protected.

Maintain fencing in an upright and neat condition. Re-stake, re-secure or re-install fencing as needed.

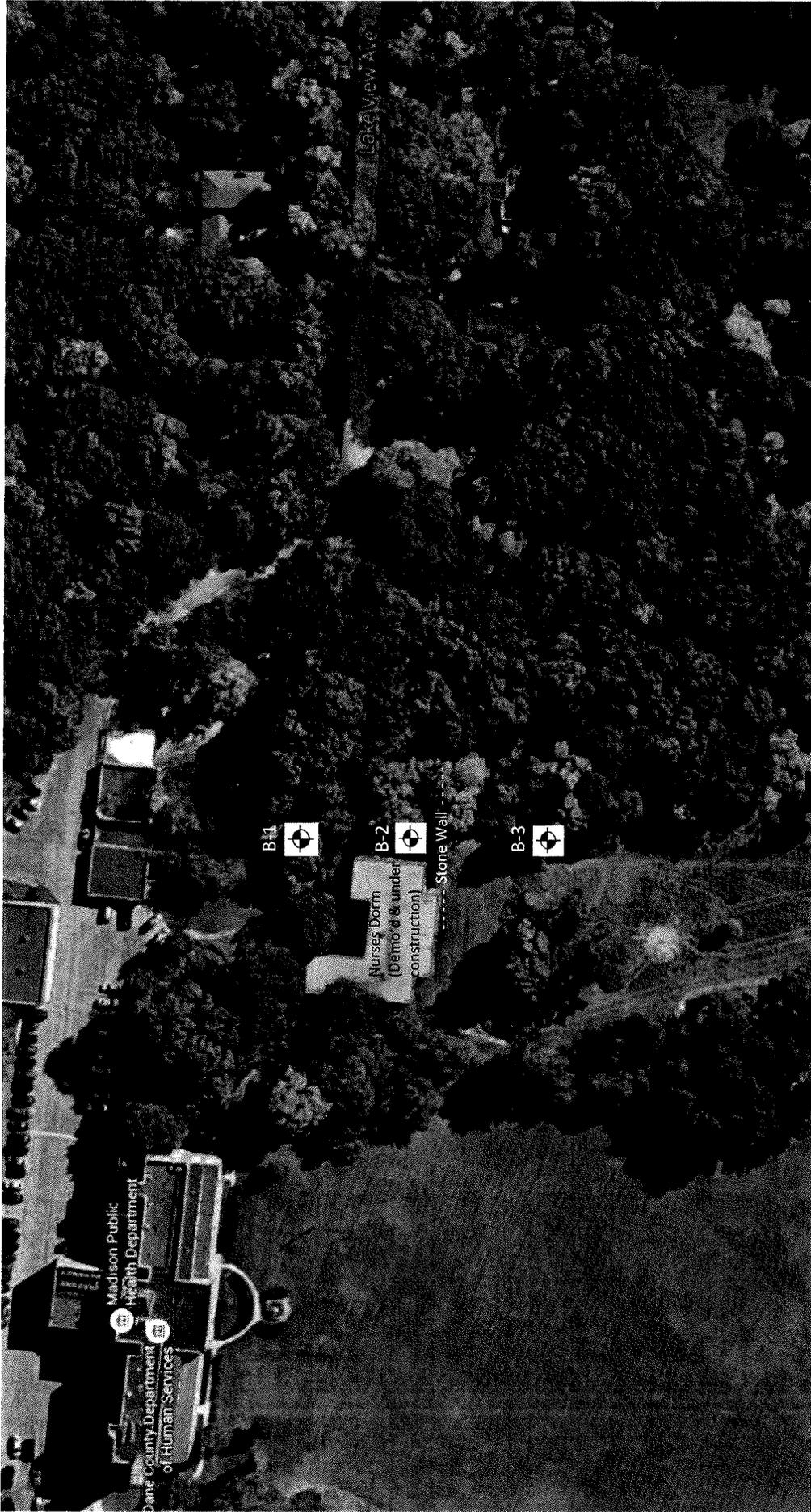
Remove the temporary fencing only after all work requiring disturbance is completed. Restore area around the tree to original condition or per plans.

Method of Measurement

Tree Protection Fencing shall be measured by each tree fenced and protected as identified in the plans.

Basis of Payment

Tree Protection Fencing shall be paid for at the contract unit price per each successfully installed, maintained and removed tree protection fence. Half of the installed quantity shall be paid at the time of installation and the remaining half shall be paid upon removal and when all required incidental restoration is completed.

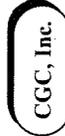


Legend
 ⊕ Denotes Boring Location

Notes

1. Soil borings performed by Badger State Drilling in November 2015
2. Boring and Stone Wall locations are approximate.

Scale: Reduced

Date: 1/2016	 CGC, Inc.
Job No. C15051-21	

Soil Boring Location Plan
Lake View Trenchless Water Main
Madison, WI



LOG OF TEST BORING

Project Lake View Trenchless Water Main
 Location Madison, WI

Boring No. 1
 Surface Elevation (ft) 971.8
 Job No. C15051-21
 Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

SAMPLE					VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES				
No.	Rec (in.)	Moist	N	Depth (ft)		qu (qa) (tsf)	W	LL	PL	LI
					7 in. TOPSOIL					
1	10	M	15		FILL: Brown Sandy Clay with Gravel					
2	4	M	50/5"		Large cobble/boulder noted near 4ft					
3	12	M	39		Dense to Very Dense, Brown Fine to Medium SAND, Some Silt and Gravel, Scattered Cobbles/Boulders (SM)					
4	14	M	59		Weathered to Competent, Brown Dolomitic Limestone BEDROCK					
5	2	M	50/3"		End Boring at 14 ft Due to Auger Refusal on Competent Bedrock					
					Borehole backfilled with bentonite chips					

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling NW Upon Completion of Drilling _____
 Time After Drilling _____
 Depth to Water _____
 Depth to Cave in _____

Start 11/23/15 End 11/23/15
 Driller BSD Chief MC Rig ATV
 Logger DB Editor ESF
 Drill Method 2.25" HSA;
Autohammer

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project Lake View Trenchless Water Main
 Location Madison, WI

Boring No. 2
 Surface Elevation (ft) 960.1
 Job No. C15051-21
 Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

SAMPLE					VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES				
No.	TH E P T H (ft)	Rec (in.)	Moist	N		Depth (ft)	q _u (qa) (tsf)	W	LL	PL
					8 in. TOPSOIL					
1		10	M	10	FILL: Brown Sandy Clay with Gravel					
2		12	M	10		(2.5)				
3		12	M	44	Dense, Brown Fine to Medium SAND, Some Silt and Gravel, Scattered Cobbles/Boulders (SM)					
					Weathered to Competent, Brown Dolomitic Limestone BEDROCK					
					End Boring at 8 ft Due to Auger Refusal on Competent Bedrock					
					Borehole backfilled with soil cuttings					

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling NW Upon Completion of Drilling _____
 Time After Drilling _____
 Depth to Water _____
 Depth to Cave in _____

Start 11/23/15 End 11/23/15
 Driller BSD Chief MC Rig ATV
 Logger DB Editor ESF
 Drill Method 2.25" HSA;
Autohammer

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project Lake View Trenchless Water Main
 Location Madison, WI

Boring No. 3
 Surface Elevation (ft) 935.8
 Job No. C15051-21
 Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

SAMPLE					VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES				
No.	TYPE E	Rec (in.)	Moist	N		Depth (ft)	qu (qa) (tsf)	W	LL	PL
1		14	M	12	<div style="border: 1px solid black; padding: 2px;">5 in. TOPSOIL</div> <div style="border: 1px solid black; padding: 2px;">Medium Dense to Dense, Brown Fine to Medium SAND, Some Silt and Gravel, Scattered Cobbles/Boulders (SM - Possible Fill to 3 ft)</div>					
2		12	M	35	<div style="border: 1px solid black; padding: 2px;">Weathered to Competent, Brown Dolomitic Limestone Bedrock</div> <div style="border: 1px solid black; padding: 2px;">End Boring at 6 ft Due to Auger Refusal on Competent Bedrock</div> <div style="border: 1px solid black; padding: 2px; text-align: center;">Borehole backfilled with soil cuttings</div>					

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling NW Upon Completion of Drilling _____
 Time After Drilling _____
 Depth to Water _____
 Depth to Cave in _____

Start 11/24/15 End 11/24/15
 Driller BSD Chief MC Rig ATV
 Logger DB Editor ESF
 Drill Method 2.25" HSA;
Autohammer

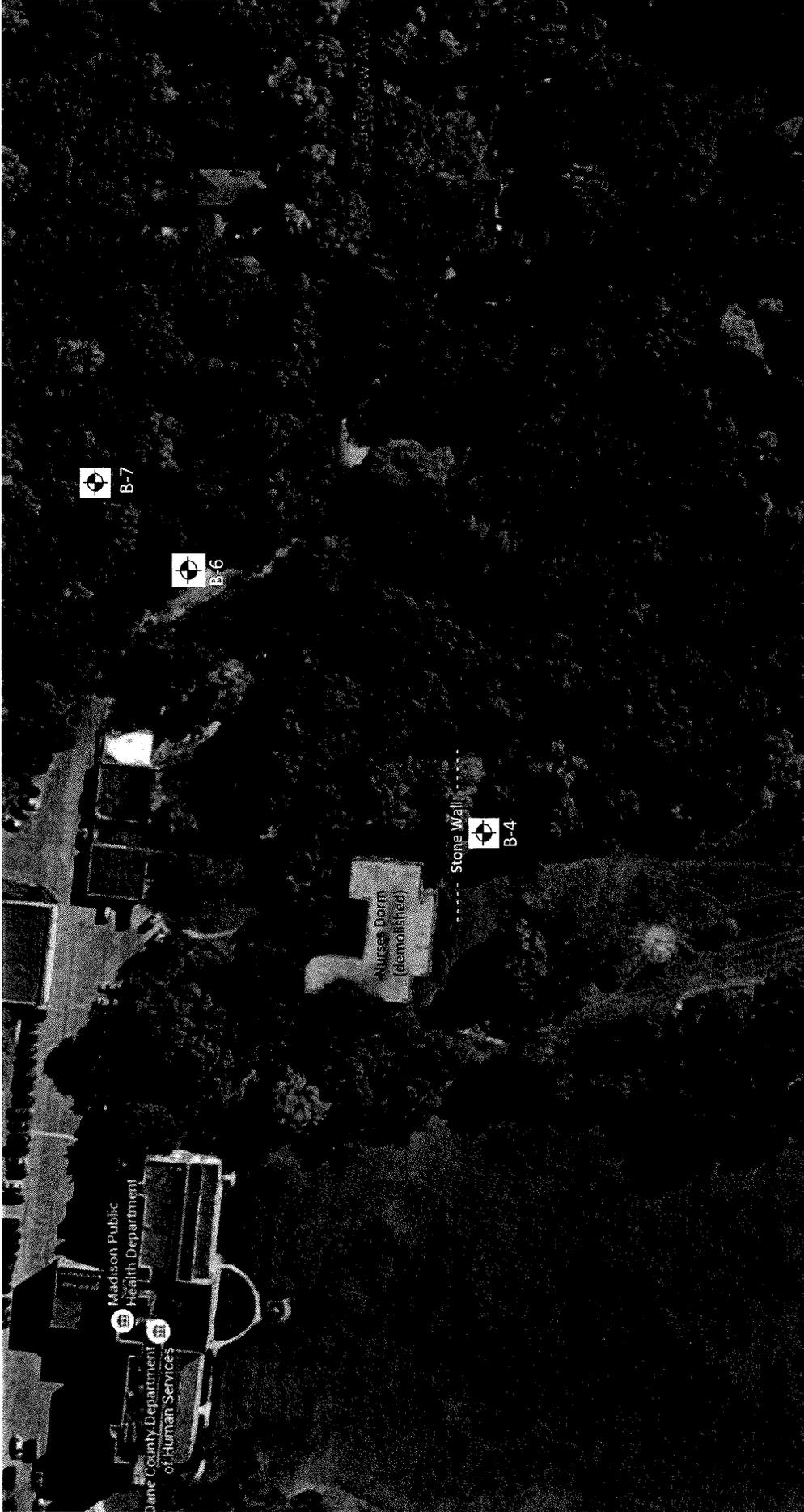
The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

Lake View
Reservoir

Esch Lane

Longview Ave

B-8



Legend

⊕ Denotes Boring Location

Notes

1. Soil borings performed by Badger State Drilling in August 2016
2. Boring and Stone Wall locations are approximate.

Scale: Reduced

Date:
8/2016

Job No.
C15051-21



Soil Boring Location Plan
Lake View Trenchless Water Main
Madison, WI





LOG OF TEST BORING

Project Lake View Trenchless Water Main
 Location Madison, WI

Boring No. 4
 Surface Elevation (ft) 946.3
 Job No. C15051-21
 Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

SAMPLE					VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES					
No.	TYPE	Rec (in.)	Moist	N		Depth (ft)	qu (qa) (tsf)	W	LL	PL	LI
					0	10 in. TOPSOIL (OL)					
1	F	8	M	12	12	FILL: Medium Dense, Brown Silty Sand with Gravel and Trace Clay					
2	F	18	M	24	24	Medium Dense, Brown Fine to Medium SAND, Some Silt and Gravel, Scattered Cobbles/Boulders (SM)					
					5.5	Apparent Weathered to Competent BEDROCK					
					5.5	End of Boring at 5.5 ft Due to Auger Refusal on Apparent Competent Bedrock					
					5.5	Backfilled with Soil Cuttings					
					10						
					15						
					20						

WATER LEVEL OBSERVATIONS	GENERAL NOTES
While Drilling <input checked="" type="checkbox"/> <u>NW</u> Upon Completion of Drilling _____ Time After Drilling _____ Depth to Water _____ Depth to Cave in _____	Start <u>8/1/16</u> End <u>8/1/16</u> Driller <u>BSD</u> Chief <u>DB</u> Rig <u>D-50</u> Logger <u>DD</u> Editor <u>ESF</u> Drill Method <u>2.25" HSA; Autohammer</u>
The stratification lines represent the approximate boundary between soil types and the transition may be gradual.	



LOG OF TEST BORING

Project Lake View Trenchless Water Main
 Location Madison, WI

Boring No. 6
 Surface Elevation (ft) 980.3
 Job No. C15051-21
 Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

SAMPLE					VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES					
No.	TYPE	Rec (in.)	Moist	N		Depth (ft)	qu (qa) (tsf)	W	LL	PL	LI
					0	10 in. TOPSOIL (OL)					
1	█	12	M	13	1	FILL: Medium Dense, Brown Silty Sand with Gravel and Trace Clay					
					2						
2	█	6	M	11	3	Weathered to Competent BEDROCK					
					4						
3	█	12	M	72	5	End of Boring at 8 ft Due to Auger Refusal on Competent Bedrock Backfilled with Soil Cuttings					
					6						
					10						
					15						
					20						

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling NW Upon Completion of Drilling _____
 Time After Drilling _____
 Depth to Water _____
 Depth to Cave in _____

Start 8/1/16 End 8/1/16
 Driller BSD Chief DB Rig D-50
 Logger DD Editor ESF
 Drill Method 2.25" HSA; Autohammer

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project Lake View Trenchless Water Main
 Location Madison, WI

Boring No. 8
 Surface Elevation (ft) 995.8
 Job No. C15051-21
 Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

SAMPLE					VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES					
No.	TYPE	Rec (in.)	Moist	N		Depth (ft)	qu (qa) (tsf)	W	LL	PL	LI
					0	8 in. TOPSOIL (OL)					
1	█	14	M	7	7	FILL: Stiff, Brown Clay with Sand	1.5				
2	█	14	M	10	10	Medium Dense, Brown Fine to Medium SAND, Some Silt and Gravel, Scattered Cobbles/Boulders (SM)					
3	█	18	M	22	22						
4	█	18	M	20	20						
					10.5	Apparent Weathered to Competent Bedrock End of Boring at 10.5 ft Due to Auger Refusal on Competent Bedrock Backfilled with Bentonite Chips					

WATER LEVEL OBSERVATIONS	GENERAL NOTES
While Drilling <input checked="" type="checkbox"/> <u>NW</u> Upon Completion of Drilling _____ Time After Drilling _____ Depth to Water _____ Depth to Cave in _____	Start <u>8/1/16</u> End <u>8/1/16</u> Driller <u>BSD Chief DB</u> Rig <u>D-50</u> Logger <u>DD</u> Editor <u>ESF</u> Drill Method <u>2.25" HSA: Autohammer</u>
The stratification lines represent the approximate boundary between soil types and the transition may be gradual.	

SECTION E: BIDDERS ACKNOWLEDGEMENT

**LAKEVIEW RESERVOIR PIPELINE IMPROVEMENTS PHASE 2
CONTRACT NO. 7452**

Bidder must state a Unit Price and Total Bid for each item. The Total Bid for each item must be the product of quantity, by Unit Price. The Grand Total must be the sum of the Total Bids for the various items. In case of multiplication errors or addition errors, the Grand Total with corrected multiplication and/or addition shall determine the Grand Total bid for each contract. The Unit Price and Total Bid must be entered numerically in the spaces provided. All words and numbers shall be written in ink.

1. The undersigned having familiarized himself/herself with the Contract documents, including Advertisement for Bids, Instructions to Bidders, Form of Proposal, City of Madison Standard Specifications for Public Works Construction - 2017 Edition thereto, Form of Agreement, Form of Bond, and Addenda issued and attached to the plans and specifications on file in the office of the City Engineer, hereby proposes to provide and furnish all the labor, materials, tools, and expendable equipment necessary to perform and complete in a workmanlike manner the specified construction on this project for the City of Madison; all in accordance with the plans and specifications as prepared by the City Engineer, including Addenda to the Contract Nos. _____ through _____ issued thereto, at the prices for said work as contained in this proposal. (Electronic bids submittals shall acknowledge addendum under Section E and shall not acknowledge here)
2. If awarded the Contract, we will initiate action within seven (7) days after notification or in accordance with the date specified in the contract to begin work and will proceed with diligence to bring the project to full completion within the number of work days allowed in the Contract or by the calendar date stated in the Contract.
3. The undersigned Bidder or Contractor certifies that he/she is not a party to any contract, combination in form of trust or otherwise, or conspiracy in restraint of trade or commerce or any other violation of the anti-trust laws of the State of Wisconsin or of the United States, with respect to this bid or contract or otherwise.
4. I hereby certify that I have met the Bid Bond Requirements as specified in Section 102.5. *(IF BID BOND IS USED, IT SHALL BE SUBMITTED ON THE FORMS PROVIDED BY THE CITY. FAILURE TO DO SO MAY RESULT IN REJECTION OF THE BID).*
5. I hereby certify that all statements herein are made on behalf of _____ (name of corporation, partnership, or person submitting bid) a corporation organized and existing under the laws of the State of _____ a partnership consisting of _____; an individual trading as _____; of the City of _____ State of _____; that I have examined and carefully prepared this Proposal, from the plans and specifications and have checked the same in detail before submitting this Proposal; that I have fully authority to make such statements and submit this Proposal in (its, their) behalf; and that the said statements are true and correct.

SIGNATURE

TITLE, IF ANY

Sworn and subscribed to before me this _____ day of _____, 20_____.

(Notary Public or other officer authorized to administer oaths)
My Commission Expires _____

Bidders shall not add any conditions or qualifying statements to this Proposal.

SECTION F: BEST VALUE CONTRACTING
LAKEVIEW RESERVOIR PIPELINE IMPROVEMENTS PHASE 2
CONTRACT NO. 7452

Best Value Contracting

1. The Contractor shall indicate the non-apprenticeable trades used on this contract.

2. Madison General Ordinance (M.G.O.), 33.07(7), does provide for some exemptions from the active apprentice requirement. Apprenticeable trades are those trades considered apprenticeable by the State of Wisconsin. Please check applicable box if you are seeking an exemption.

- Contractor has a total skilled workforce of four or less individuals in all apprenticeable trades combined.
- No available trade training program; The Contractor has been rejected by the only available trade training program, or there is no trade training program within 90 miles.
- Contractor is not using an apprentice due to having a journey worker on layoff status, provided the journey worker was employed by the contractor in the past six months.
- First-time Contractor on City of Madison Public Works contract requests a onetime exemption but intends to comply on all future contracts and is taking steps typical of a "good faith" effort.
- Contractor has been in business less than one year.
- Contractor doesn't have enough journeyman trade workers to qualify for a trade training program in that respective trade.
- An exemption is granted in accordance with a time period of a "Documented Depression" as defined by the State of Wisconsin.

3. The Contractor shall indicate on the following section which apprenticeable trades are to be used on this contract. Compliance with active apprenticeship, to the extent required by M.G.O. 33.07(7), shall be satisfied by documentation from an applicable trade training body; an apprenticeship contract with the Wisconsin Department of Workforce Development or a similar agency in another state; or the U.S Department of Labor. This documentation is required prior to the Contractor beginning work on the project site.

- The Contractor has reviewed the list and shall not use any apprenticeable trades on this project.

LIST APPRENTICABLE TRADES (check all that apply to your work to be performed on this contract)

- BRICKLAYER
- CARPENTER
- CEMENT MASON / CONCRETE FINISHER
- CEMENT MASON (HEAVY HIGHWAY)
- CONSTRUCTION CRAFT LABORER
- DATA COMMUNICATION INSTALLER
- ELECTRICIAN
- ENVIRONMENTAL SYSTEMS TECHNICIAN / HVAC SERVICE TECH/HVAC INSTALL / SERVICE
- GLAZIER
- HEAVY EQUIPMENT OPERATOR / OPERATING ENGINEER
- INSULATION WORKER (HEAT & FROST)
- IRON WORKER
- IRON WORKER (ASSEMBLER, METAL BLDGS)
- PAINTER & DECORATOR
- PLASTERER
- PLUMBER
- RESIDENTIAL ELECTRICIAN
- ROOFER & WATER PROOFER
- SHEET METAL WORKER
- SPRINKLER FITTER
- STEAMFITTER
- STEAMFITTER (REFRIGERATION)
- STEAMFITTER (SERVICE)
- TAPER & FINISHER
- TELECOMMUNICATIONS (VOICE, DATA & VIDEO) INSTALLER-TECHNICIAN
- TILE SETTER

SECTION G: BID BOND

KNOW ALL MEN BY THESE PRESENT, THAT Principal and Surety, as identified below, are held and firmly bound unto the City of Madison, (hereinafter referred to as the "Obligee"), in the sum of five per cent (5%) of the amount of the total bid or bids of the Principal herein accepted by the Obligee, for the payment of which the Principal and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

The conditions of this obligation are such that, whereas the Principal has submitted, to the City of Madison a certain bid, including the related alternate, and substitute bids attached hereto and hereby made a part hereof, to enter into a contract in writing for the construction of:

LAKEVIEW RESERVOIR PIPELINE IMPROVEMENTS PHASE 2 CONTRACT NO. 7452

1. If said bid is rejected by the Obligee, then this obligation shall be void.
2. If said bid is accepted by the Obligee and the Principal shall execute and deliver a contract in the form specified by the Obligee (properly completed in accordance with said bid) and shall furnish a bond for his/her faithful performance of said contract, and for the payment of all persons performing labor or furnishing materials in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said bid, then this obligation shall be void.

If said bid is accepted by the Obligee and the Principal shall fail to execute and deliver the contract and the performance and payment bond noted in 2. above executed by this Surety, or other Surety approved by the City of Madison, all within the time specified or any extension thereof, the Principal and Surety agree jointly and severally to forfeit to the Obligee as liquidated damages the sum mentioned above, it being understood that the liability of the Surety for any and all claims hereunder shall in no event exceed the sum of this obligation as stated, and it is further understood that the Principal and Surety reserve the right to recover from the Obligee that portion of the forfeited sum which exceed the actual liquidated damages incurred by the Obligee.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its bond shall be in no way impaired or affected by an extension of the time within which the Obligee may accept such bid, and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, on the day and year set forth below.

Seal PRINCIPAL

Name of Principal

By

Date

Name and Title

Seal SURETY

Name of Surety

By

Date

Name and Title

This certifies that I have been duly licensed as an agent for the above company in Wisconsin under National Provider No. _____ for the year _____, and appointed as attorney in fact with authority to execute this bid bond and the payment and performance bond referred to above, which power of attorney has not been revoked.

Date

Agent Signature

Address

City, State and Zip Code

Telephone Number

NOTE TO SURETY & PRINCIPAL

The bid submitted which this bond guarantees shall be rejected if the following instrument is not attached to this bond:

Power of Attorney showing that the agent of Surety is currently authorized to execute bonds on behalf of the Surety, and in the amounts referenced above.

Certificate of Biennial Bid Bond

TIME PERIOD - VALID (FROM/TO)
NAME OF SURETY
NAME OF CONTRACTOR
CERTIFICATE HOLDER <p style="text-align: center;">City of Madison, Wisconsin</p>

This is to certify that a biennial bid bond issued by the above-named Surety is currently on file with the City of Madison.

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 biennial 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

SECTION H: AGREEMENT

THIS AGREEMENT made this _____ day of _____ in the year Two Thousand and Seventeen between _____ hereinafter called the Contractor, and the City of Madison, Wisconsin, hereinafter called the City.

WHEREAS, the Common Council of the said City of Madison under the provisions of a resolution adopted _____, and by virtue of authority vested in the said Council, has awarded to the Contractor the work of performing certain construction.

NOW, THEREFORE, the Contractor and the City, for the consideration hereinafter named, agree as follows:

1. **Scope of Work.** The Contractor shall, perform the construction, execution and completion of the following listed complete work or improvement in full compliance with the Plans, Specifications, Standard Specifications, Supplemental Specifications, Special Provisions and contract; perform all items of work covered or stipulated in the proposal; perform all altered or extra work; and shall furnish, unless otherwise provided in the contract, all materials, implements, machinery, equipment, tools, supplies, transportation, and labor necessary to the prosecution and completion of the work or improvements:

LAKEVIEW RESERVOIR PIPELINE IMPROVEMENTS PHASE 2 CONTRACT NO. 7452

2. **Completion Date/Contract Time.** Construction work must begin within seven (7) calendar days after the date appearing on mailed written notice to do so shall have been sent to the Contractor and shall be carried on at a rate so as to secure full completion SEE SPECIAL PROVISIONS, the rate of progress and the time of completion being essential conditions of this Agreement.
3. **Contract Price.** The City shall pay to the Contractor at the times, in the manner and on the conditions set forth in said specifications, the sum of _____ (\$ _____) Dollars being the amount bid by such Contractor and which was awarded to him/her as provided by law.
4. **Affirmative Action.** In the performance of the services under this Agreement the Contractor agrees not to discriminate against any employee or applicant because of race, religion, marital status, age, color, sex, disability, national origin or ancestry, income level or source of income, arrest record or conviction record, less than honorable discharge, physical appearance, sexual orientation, gender identity, political beliefs, or student status. The Contractor further agrees not to discriminate against any subcontractor or person who offers to subcontract on this contract because of race, religion, color, age, disability, sex, sexual orientation, gender identity or national origin.

The Contractor agrees that within thirty (30) days after the effective date of this agreement, the Contractor will provide to the City Affirmative Action Division certain workforce utilization statistics, using a form to be furnished by the City.

If the contract is still in effect, or if the City enters into a new agreement with the Contractor, within one year after the date on which the form was required to be provided, the Contractor will provide updated workforce information using a second form, also to be furnished by the City. The second form will be submitted to the City Affirmative Action Division no later than one year after the date on which the first form was required to be provided.

The Contractor further agrees that, for at least twelve (12) months after the effective date of this contract, it will notify the City Affirmative Action Division of each of its job openings at facilities in Dane County for which applicants not already employees of the Contractor are to be considered. The notice will include a job description, classification, qualifications and application procedures

and deadlines. The Contractor agrees to interview and consider candidates referred by the Affirmative Action Division if the candidate meets the minimum qualification standards established by the Contractor, and if the referral is timely. A referral is timely if it is received by the Contractor on or before the date started in the notice.

Articles of Agreement Article I

The Contractor shall take affirmative action in accordance with the provisions of this contract to insure that applicants are employed, and that employees are treated during employment without regard to race, religion, color, age, marital status, disability, sex, sexual orientation, gender identity or national origin and that the employer shall provide harassment free work environment for the realization of the potential of each employee. Such action 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 insofar as it is within the control of the Contractor. The Contractor agrees to post in conspicuous places available to employees and applicants notices to be provided by the City setting out the provisions of the nondiscrimination clauses in this contract.

Article II

The Contractor shall in all solicitations or advertisements for employees placed by or on behalf of the Contractors state that all qualified or qualifiable applicants will be employed without regard to race, religion, color, age, marital status, disability, sex, sexual orientation, gender identity or national origin.

Article III

The Contractor shall send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding a notice to be provided by the City advising the labor union or worker's representative of the Contractor's equal employment opportunity and affirmative action commitments. Such notices shall be posted in conspicuous places available to employees and applicants for employment.

Article V

The Contractor agrees that it will comply with all provisions of the Affirmative Action Ordinance of the City of Madison, including the contract compliance requirements. The Contractor agrees to submit the model affirmative action plan for public works contractors in a form approved by the Affirmative Action Division Manager.

Article VI

The Contractor will maintain records as required by Section 39.02(9)(f) of the Madison General Ordinances and will provide the City Affirmative Action Division with access to such records and to persons who have relevant and necessary information, as provided in Section 39.02(9)(f). The City agrees to keep all such records confidential, except to the extent that public inspection is required by law.

Article VII

In the event of the Contractor's or subcontractor's failure to comply with the Equal Employment Opportunity and Affirmative Action Provisions of this contract or Section 39.03 and 39.02 of the Madison General Ordinances, it is agreed that the City at its option may do any or all of the following:

1. Cancel, terminate or suspend this Contract in whole or in part.

2. Declare the Contractor ineligible for further City contracts until the Affirmative Action requirements are met.
3. Recover on behalf of the City from the prime Contractor 0.5 percent of the contract award price for each week that such party fails or refuses to comply, in the nature of liquidated damages, but not to exceed a total of five percent (5%) of the contract price, or five thousand dollars (\$5,000), whichever is less. Under public works contracts, if a subcontractor is in noncompliance, the City may recover liquidated damages from the prime Contractor in the manner described above. The preceding sentence shall not be construed to prohibit a prime Contractor from recovering the amount of such damage from the non-complying subcontractor.

Article VIII

The Contractor shall include the above provisions of this contract in every subcontract so that such provisions will be binding upon each subcontractor. The Contractor shall take such action with respect to any subcontractor as necessary to enforce such provisions, including sanctions provided for noncompliance.

Article IX

The Contractor shall allow the maximum feasible opportunity to small business enterprises to compete for any subcontracts entered into pursuant to this contract. (In federally funded contracts the terms "DBE, MBE and WBE" shall be substituted for the term "small business" in this Article.)

5. Substance Abuse Prevention Program Required. Prior to commencing work on the Contract, the Contractor, and any Subcontractor, shall have in place a written program for the prevention of substance abuse among its employees as required under Wis. Stat. Sec. 103.503.
6. **Contractor Hiring Practices.**

Ban the Box - Arrest and Criminal Background Checks. (Sec. 39.08, MGO)

This provision applies to all prime contractors on contracts entered into on or after January 1, 2016, and all subcontractors who are required to meet prequalification requirements under MGO 33.07(7)(l), MGO as of the first time they seek or renew pre-qualification status on or after January 1, 2016. The City will monitor compliance of subcontractors through the pre-qualification process.

- a. **Definitions.** For purposes of this section, "Arrest and Conviction Record" includes, but is not limited to, information indicating that a person has been questioned, apprehended, taken into custody or detention, held for investigation, arrested, charged with, indicted or tried for any felony, misdemeanor or other offense pursuant to any law enforcement or military authority.

"Conviction record" includes, but is not limited to, information indicating that a person has been convicted of a felony, misdemeanor or other offense, placed on probation, fined, imprisoned or paroled pursuant to any law enforcement or military authority.

"Background Check" means the process of checking an applicant's arrest and conviction record, through any means.

- b. **Requirements.** For the duration of this Contract, the Contractor shall:
 1. Remove from all job application forms any questions, check boxes, or other inquiries regarding an applicant's arrest and conviction record, as defined herein.

2. Refrain from asking an applicant in any manner about their arrest or conviction record until after conditional offer of employment is made to the applicant in question.
3. Refrain from conducting a formal or informal background check or making any other inquiry using any privately or publicly available means of obtaining the arrest or conviction record of an applicant until after a conditional offer of employment is made to the applicant in question.
4. Make information about this ordinance available to applicants and existing employees, and post notices in prominent locations at the workplace with information about the ordinance and complaint procedure using language provided by the City.
5. Comply with all other provisions of Sec. 39.08, MGO.

c. Exemptions: This section shall not apply when:

1. Hiring for a position where certain convictions or violations are a bar to employment in that position under applicable law, or
2. Hiring a position for which information about criminal or arrest record, or a background check is required by law to be performed at a time or in a manner that would otherwise be prohibited by this ordinance, including a licensed trade or profession where the licensing authority explicitly authorizes or requires the inquiry in question.

To be exempt, Contractor has the burden of demonstrating that there is an applicable law or regulation that requires the hiring practice in question, if so, the contractor is exempt from all of the requirements of this ordinance for the position(s) in question.

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IN WITNESS WHEREOF, the Contractor has hereunto set his/her hand and seal and the City has caused these presents to be sealed with its corporate seal and to be subscribed by its Mayor and City Clerk the day and year first above written.

Countersigned:

	Company Name
Witness	Date

CITY OF MADISON, WISCONSIN

Provisions have been made to pay the liability that will accrue under this contract.

Approved as to form:

Finance Director	City Attorney
Signed this _____ day of _____, 20_____	
Witness	Date
Witness	Date
Witness	Date

SECTION I: PAYMENT AND PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS, that we _____
as _____ principal, _____ and

Company of _____ as surety, are held and firmly bound unto the City of
Madison, Wisconsin, in the sum of _____ (\$_____) Dollars, lawful money of the
United States, for the payment of which sum to the City of Madison, we hereby bind ourselves and our
respective executors and administrators firmly by these presents.

The condition of this Bond is such that if the above bounden shall on his/her part fully and faithfully
perform all of the terms of the Contract entered into between him/herself and the City of Madison for the
construction of:

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in Madison, Wisconsin, and shall pay all claims for labor performed and material furnished in the
prosecution of said work, and save the City harmless from all claims for damages because of negligence
in the prosecution of said work, and shall save harmless the said City from all claims for compensation
(under Chapter 102, Wisconsin Statutes) of employees and employees of subcontractor, then this Bond is
to be void, otherwise of full force, virtue and effect.

Signed and sealed this _____ day of _____

Countersigned:

Company Name (Principal)

Witness

President Seal

Secretary

Approved as to form:

Surety Seal

Salary Employee Commission

City Attorney

By _____
Attorney-in-Fact

This certifies that I have been duly licensed as an agent for the above company in Wisconsin under
National Producer Number _____ for the year _____, and appointed as attorney-in-fact
with authority to execute this payment and performance bond which power of attorney has not been
revoked.

Date

Agent Signature