

Contract Routing Form

ROUTING: Routine

printed on: 03/13/2019

Contract between: R.G. Huston Co., Inc.
and Dept. or Division: Engineering Division
Name/Phone Number:

Project: Spring Harbor at Masthead (Nautilus Pond)

Contract No.: 8325
Enactment No.: RES-19-00175
Dollar Amount: 716,280.00

File No.: 54705
Enactment Date: 03/08/2019

(Please DATE before routing)

Signatures Required	Date Received	Date Signed
City Clerk	3-13-19	3/13/19
Director of Civil Rights	3/13/19	3-21-19 FNU
Risk Manager	3-22-19	3-22-19 MCL
Finance Director	3-22-19	3/22/19 MCL
City Attorney	304 3-25-19	3-26-19
Mayor	3-27-19	3-27-19

Please return signed Contracts to the City Clerk's Office
Room 103, City-County Building for filing.

Original + 2 Copies

03/13/2019 11:24:16 enjls - Sally Swenson 266-4862

Dis Rights: OK / N/A / Problem - Hold
Prev Wage: Agency / No
Contract Value: 716,280.00
AA Plan: Approved
Amendment / Addendum # _____
Type: POS / Dvlp / Sbdv / Gov't /
Grant / PW / Goal / Loan / Agrmt



Legislation Details (With Text)

File #: 54705 **Version:** 1 **Name:** Awarding Public Works Contract No. 8325, Spring Harbor at Masthead (Nautilus Pond).

Type: Resolution **Status:** Passed

File created: 2/13/2019 **In control:** Engineering Division

On agenda: 3/5/2019 **Final action:** 3/5/2019

Enactment date: 3/8/2019 **Enactment #:** RES-19-00175

Title: Awarding Public Works Contract No. 8325, Spring Harbor at Masthead (Nautilus Pond). (19th AD)

Sponsors: BOARD OF PUBLIC WORKS

Indexes:

Code sections:

Attachments: 1. Contract 8325.pdf

Date	Ver.	Action By	Action	Result
3/5/2019	1	COMMON COUNCIL	Adopt Under Suspension of Rules 2.04, 2.05, 2.24, and 2.25	Pass
2/20/2019	1	BOARD OF PUBLIC WORKS		
2/13/2019	1	Engineering Division	Refer	

The proposed resolution awards the contract for the pond Nautilus Pond reconstruction project at an estimated cost of \$773,500. Funding for this project is provided by Stormwater Utility GO borrowing budgeted within the Stormwater Utility's Stormwater Quality System Improvements capital program.

MUNIS:
11399-84-174-84200

Awarding Public Works Contract No. 8325, Spring Harbor at Masthead (Nautilus Pond). (19th AD)
BE IT RESOLVED, that the following low bids for miscellaneous improvements be accepted and that the Mayor and City Clerk be and are hereby authorized and directed to enter into a contract with the low bidder contained herein, subject to the Contractor's compliance with Section 39.02 of the Madison General Ordinances concerning compliance with the Affirmative Action provisions **and subject to the Contractor's compliance with Section 33.07 of the Madison General Ordinances regarding Best Value Contracting:**

BE IT FURTHER RESOLVED, that the funds be encumbered to cover the cost of the projects contained herein.

See attached document (Contract No. 8325) for itemization of bids.

PROJECT _____ CONTRACTOR _____ AMOUNT OF BID _____

CONTRACT NO. 8325
SPRING HARBOR AT MASTHEAD (NAUTILUS POND)

R. G. HUSTON CO., INC.

\$716,280.00

Acct. No. 11399-84-174-84400 (91223)	\$285,869.17
Contingency 8±	<u>22,870.83</u>
Sub-Total	\$308,740.00

Acct. No. 11399-84-174-84600 (91223)	\$302,862.60
Contingency 8±	<u>24,227.40</u>
Sub-Total	\$327,090.00

Acct. No. 11399-84-174-84200 (91223)	\$127,548.23
Contingency 8±	<u>10,201.77</u>
Sub-Total	\$137,750.00

GRAND TOTAL	<u>\$773,580.00</u>
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Jurisdiction: Wisconsin

Demographics

Company Name: Travelers Casualty and Surety Company of America
 SBS Company Number: 54218780
 Domicile Type: Foreign
 NAIC Group Number: 3548 - Travelers Grp
 Merger Flag: Yes

NAIC CoCode: 31194
 State of Domicile: Connecticut
 Organization Type: Stock

Short Name:
 FEIN: 08-0907370
 Country of Domicile: United States
 Date of Incorporation: 07/18/1974

Address

Business Address	Mailing Address	Statutory Home Office Address	Main Administrative Office Address
1 TOWER SQ HARTFORD, CT 06183 United States	1 TOWER SQ HARTFORD, CT 06183 United States	1 TOWER SQ HARTFORD, CT 06183 United States	1 TOWER SQ HARTFORD, CT 06183 United States

Phone, Email, Website

Phone	Email	Website
Type: Business Primary Phone Number: (860) 277-0111	No results found.	No results found.

Company Type

Company Type: Property and Casualty	Status Reason:	Status Date: 09/10/1975
Status: Active	Legacy State ID: 110846	
Effective Date: 07/01/1997	Approval Date:	File Date:
Issue Date: 09/10/1975	Article No:	COA Number:
Articles of Incorporation Received: No		

Appointments

Show 10 entries Showing 1 to 8 of 4395 entries

Licensee Name	License Number	NPN	License Type	Line of Authority	Appointment Date	Effective Date	Expiration Date
DENNIS DIESSNER	365288	365288	Intermediary (Agent) Individual	Casualty	05/29/2013	01/24/2019	03/15/2020
DENNIS KUHNKE	283914	283914	Intermediary (Agent) Individual	Casualty	02/06/2015	01/24/2019	03/15/2020
DENNIS BARTON	283633	283633	Intermediary (Agent) Individual	Casualty	06/15/1993	01/24/2019	03/15/2020
JOHN DENNIS	993414	993414	Intermediary (Agent) Individual	Casualty	11/12/2015	01/24/2019	03/15/2020
DENNIS DIESSNER	365288	365288	Intermediary (Agent) Individual	Property	05/29/2013	01/24/2019	03/15/2020
DENNIS KUHNKE	283914	283914	Intermediary (Agent) Individual	Property	02/06/2015	01/24/2019	03/15/2020
DENNIS BARTON	283633	283633	Intermediary (Agent) Individual	Property	06/15/1993	01/24/2019	03/15/2020
JOHN DENNIS	993414	993414	Intermediary (Agent) Individual	Property	11/12/2015	01/24/2019	03/15/2020

First Previous 1 Next Last

Line Of Business

Show 10 entries Showing 1 to 10 of 11 entries

Line of Business	Citation Type	Effective Date
Aircraft	Aircraft	09/10/1975
Automobile	Automobile	09/10/1975
Credit Insurance	Credit Insurance	09/10/1975
Disability Insurance	Disability Insurance	09/10/1975
Fidelity Insurance	Fidelity Insurance	09/10/1975
Workers Compensation Insurance	Workers Compensation Insurance	06/29/1990
Liability and Incidental Medical Expense Insurance (other than automobile)	Liability and Incidental Medical Expense Insurance (other than automobile)	09/10/1975
Miscellaneous	Miscellaneous	09/10/1975
Ocean Marine Insurance	Ocean Marine Insurance	09/10/1975
Surety Insurance	Surety Insurance	09/10/1975

First Previous 1 2 Next Last

Contact

Contact Type	Preferred Name	Name	E-mail	Phone	Address
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Company Merger

SBS Company Number	NAIC CoCode	Non-Surviving Company	Non-Surviving Company Type	Terminated Appointments	Transferred Appointments	Merger Date	Comments
54221052	22535	Seaboard Surety Company	Property and Casualty	N	N	01/02/2009	

Companies Absorbed

Name Change History

Previous Name	New Name	Effective Date
	Aetna Casualty & Surety Company of America	09/10/1975
Aetna Casualty & Surety Company of America	Travelers Casualty and Surety Company of America	07/01/1997

\$716,280.00
FILE

BID OF R. G. HUSTON CO., INC.

2019

PROPOSAL, CONTRACT, BOND AND SPECIFICATIONS

FOR

SPRING HARBOR AT MASTHEAD (NAUTILUS POND)

CONTRACT NO. 8325

PROJECT NO. 11399

MUNIS NO. 11399

IN

MADISON, DANE COUNTY, WISCONSIN

AWARDED BY THE COMMON COUNCIL
MADISON, WISCONSIN ON MARCH 5, 2019

CITY ENGINEERING DIVISION
1600 EMIL STREET
MADISON, WISCONSIN 53713

<https://bidexpress.com/login>

**SPRING HARBOR AT MASTHEAD (NAUTILUS POND)
CONTRACT NO. 8325**

INDEX

SECTION A: ADVERTISEMENT FOR BIDS AND INSTRUCTIONS TO BIDDERSA-1
SECTION B: PROPOSAL SECTIONB-1
SECTION C: SMALL BUSINESS ENTERPRISE C-1
SECTION D: SPECIAL PROVISIONS D-1
SECTION E: BIDDER'S ACKNOWLEDGEMENTE-1
SECTION F: BEST VALUE CONTRACTINGF-1
SECTION G: BID BOND G-1
SECTION H: AGREEMENT..... H-1
SECTION I: PAYMENT AND PERFORMANCE BONDI-1

This Proposal, and Agreement have
been prepared by:

**CITY ENGINEERING DIVISION
CITY OF MADISON
MADISON, DANE COUNTY, WISCONSIN**



Robert F. Phillips, P.E., City Engineer

RFP: scs

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:	SPRING HARBOR AT MASTHEAD (NAUTILUS POND)
CONTRACT NO.:	8325
SBE GOAL	6%
BID BOND	5%
SBE PRE BID MEETING (1:00 P.M.)	February 1, 2019
PREQUALIFICATION APPLICATION DUE (2:00 P.M.)	January 31, 2019
BID SUBMISSION (2:00 P.M.)	February 7, 2019
BID OPEN (2:30 P.M.)	February 7, 2019
PUBLISHED IN WSJ	January 24 & 31, 2019

SBE 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 - 2019 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 (City of Madison form) 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.

SECTION D: SPECIAL PROVISIONS

SPRING HARBOR AT MASTHEAD (NAUTILUS POND) CONTRACT NO. 8325

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 102.11: BEST VALUE CONTRACTING

This Contract shall be considered a Best Value Contract if the Contractor's bid is equal to or greater than \$62,500 for a single trade contract; or equal to or greater than \$306,000 for a multi-trade contract pursuant to MGO 33.07(7).

SECTION 104 SCOPE OF WORK

This contract and associated plan set describes the work necessary to construct a stormwater pond and iron enhanced sand filter on City of Madison owned parcels at 321 Nautilus Drive and 300 Island Drive. The project also includes the grading and stabilization of approximately 750 linear feet of channel.

SECTION 104.1 LANDS FOR WORK

This project is located on parcels at 321 Nautilus Drive and 300 Island Drive. The Contractor shall be aware that this parcel is adjacent to several private parcels. Rear property irons were not set during subdivision construction. Therefore the property lines shown on the plan set are approximate. **The Contractor shall not work outside of the defined grading limits shown on the plan set.**

SECTION 104.4 INCREASE OR DECREASE QUANTITIES

The Contractor shall note that some bid item quantities may increase or decrease based on conditions encountered in the field. If the actual quantities vary from the plan quantity by more than allowed in Section 104.4 of the Standard Specifications for Public Works Construction, no additional compensation shall be given for increasing or decreasing quantities.

The bid prices for this item shall remain per the bid documents regardless of the percentage changes.

SECTION 105.12 COOPERATION OF THE CONTRACTOR

The City is aware two private utilities on site. Due to tree cover, the utilities could not be located and/or relocated prior to the project. Therefore, the Contractor shall accommodate the following utility coordination:

- MG&E: A buried electrical line crosses the greenway near Channel Station: 18+00. When tree removal permits, the Contractor shall perform a ULO on the buried electrical line. Data from the ULO shall be given to the Project Engineer in a timely manner. A determination as to whether the line need to be relocated will be made by MG&E and the Project Engineer. If the line is to be relocated, the Contractor shall allow 6 weeks for the utility relocation, prior to finishing that section of channel.
- Spectrum: A buried telecommunications line appears to be within the same trench as the MG&E electrical. The plan for identification and relocation is the same as outlined above.

- AT&T: An overhead telecommunications line crosses the greenway near Channel Station: 18+50. This line will be relocated following tree removal in the northeast area of the project. The Contractor shall allow 4 weeks for line relocation by AT&T following tree removal.

In addition to the utility conflicts listed above, the City of Madison will be letting a contract to resurface Masthead Drive. The Contractor shall work with the City to accomplish this project. This may include delays or altered work schedules.

SECTION 107.2 PROTECTION AND RESTORATION OF PROPERTY

The Contractor shall take extreme care to protect fencing, landscaping, and any structures located near the construction limits of this project.

The Contractor, with the Project Manager and Construction Engineer, shall walk the site and record the condition of existing adjacent items with photographs, to create a benchmark for restoration. Any private property damaged during the project shall be repaired by the Contractor at no additional cost to the City.

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.

Mineral Point Road shall be fully open to traffic during peak hours. For 4 consecutive weeks, during off peak hours, the Bus Bike Only lane may be closed for 10 feet from the face of curb. The two inside travel lanes shall remain fully open at all times. An electronic arrow board is not needed for the closure. The closure shall only occur west of the bus stop on Mineral Point Road near Island Drive and the lane shall be fully open before westbound traffic reaches Nautilus Drive.

Nautilus Drive shall be fully open to two way traffic at all times for the duration of the project. Parking may be removed on the east side of Nautilus Drive from Mineral Point Road 150 feet to the north.

Masthead Drive shall be fully open to two way traffic at all times for the duration of the project. The sidewalk on the south side of the street between Nautilus Drive and Island Drive may be closed so long as the bus stop on the south side of Masthead Drive remains open at all times.

Island Drive shall be fully open to two way traffic at all times for the duration of the project.

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, tubular posts and bases 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 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. When 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. 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 specification.

SECTION 108.2 PERMITS

The following permits are required (and have been or will be applied for by the City) for this project:

- Army Corps of Engineers Permit Letter of Permission – See Attached Permit Conditions
- WI-DNR Chapter 30 Permit – See Attached Permit Conditions
- WI-DNR WRAPP Notice of Intent
- City of Madison Erosion Control and Stormwater Management Permit

It shall be the responsibility of the Contractor to obtain the permits listed below, if required, and to pay all applicable charges and fees associated with these permits.

- Wisconsin DNR Type II Dewatering

All permit costs shall be considered incidental to the Site Dewatering bid item.

The Contractor shall be responsible for knowing, understanding, and meeting the conditions of all permits and must keep a copy of each individual permit on site at all times throughout construction. Any questions pertaining to permit compliance shall be immediately brought to the attention of the Project or Construction Engineer.

With regard to Control of Invasive or Exotic Species, the Chapter 30 permit will stipulate that any equipment or materials that may be in contact with invasive or exotic species must be decontaminated prior to and after work at the project site. It shall be the Contractor's responsibility to comply with decontamination requirements.

The Contractor shall meet the conditions of the permits including 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 his designees. This work will be paid for under the appropriate bid items, or if appropriate items are not included in the contract, they shall be paid for as Extra Work.

The City's obtaining these permits 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.

SECTION 109.2 PROSECUTION OF THE WORK

The timeframe for this project is intended to allow the Contractor to schedule work in a manner that is convenient to them. The project window shall begin on **April 1, 2019**, and all work shall be completed on **December 31, 2019**. The Contractor shall be allowed **100 working days** to complete the work defined in this contract.

Once started, the Contractor shall work continuously to complete the project. The Contractor may be permitted one project suspension during the allowable work window, provided a Shut-Down Plan has been submitted to and approved by the Project Engineer. A shut-down shall not be permitted without appropriate stabilization measures and site clean-up.

Weather days shall be permitted outside the allowable working days. The Contractor shall resume work immediately following weather days.

Work shall begin only after the start work letter is received. If it is desirable to begin work before the above-mentioned date, the contract must be fully executed and the Contractor shall establish a mutually acceptable date with the City Engineer (contact the Construction Engineer at 266-9091).

No tree clearing shall occur between June 1 and July 31.

The Contractor shall limit the workdays from 7:00 a.m. to 7:00 p.m., Monday through Saturday, unless approved by the Engineer in writing and no work shall be performed on holidays.

SECTION 301.10 CONCRETE WASTE MANAGEMENT

The Contractor shall be aware that all locations on the project site drain to surface waters. Appropriate steps shall be taken to manage concrete waste, including washing of trucks and tools.

BID ITEM 10912: MOBILIZATION

DESCRIPTION

Work under this item shall include all costs associated with mobilization of the Contractor to the site. The Contractor shall not stage equipment or materials outside of the project limits.

Damage to curb and gutter, sidewalks, streets, or other features within the Right of Way, or on adjacent property, shall be the responsibility of the Contractor to repair at no additional cost to the City. This shall include sidewalk and curb and gutter damaged due to site access.

The Construction Engineer and/or Project Engineer shall determine extents of damage and required replacement.

METHOD OF MEASUREMENT

Mobilization shall be measured as a Lump Sum.

BASIS OF PAYMENT

Mobilization shall be measured as described above, and shall be paid at the contract unit price, which shall be considered full compensation for work as defined in this bid item.

BID ITEM 20101: EXCAVATION CUT

DESCRIPTION

Work under this item shall include all labor, equipment, materials, and incidentals necessary to excavate to grades as represented by the contours on the plan set, as shown on the cross-sections, or as defined in these Special Provisions. The bid item excludes the stripping of topsoil, which is paid under Bid Item 20221.

Cut and Fill quantities were calculated using the average end area method. Unless there are significant changes (>10% volume change), the plan quantity shall be the final amount for payment. No expansion or shrinkage factors have been applied to the earthwork quantities.

- Total Cut: **13,992 C.Y.**
 - Topsoil Removal 4,552 C.Y. *(Paid Under Bid Item 20221)*
 - Pond & Channel Grading: 5,667 C.Y.
 - Clay Liner Undercut: 2,024 C.Y.
 - Iron Enhanced Filter: 510 C.Y.
 - Infiltration Trench: 290 C.Y.
 - Access Roads: 949 C.Y.

- Total Fill
 - Pond/Site Grading: 2,595 C.Y.
 - Access Road Aggregate: 678 C.Y. *(Paid Under Bid Item 40102)*
 - Clay Liner: 2,024 C.Y. *(Paid Under Bid Item 90040)*
 - Iron Enhance Sand Media: 506 C.Y. *(Paid Under Bid Item 90037)*
 - 3-Inch Clear – Infiltration Trench: 209 C.Y. *(Paid Under Bid Item 20217)*
 - Topsoil Placement: 2,088 C.Y. *(Paid Under Bid Item 20221)*

Where topsoil in the pond area is to be placed below the finish grades shown, the over excavation for the placement of topsoil has been included in the excavation quantity. Topsoil segregation, temporary stockpiling, and redistribution over disturbed areas, shall be paid under Bid Item 20221 – Topsoil.

Placement of on-site fill shall be included in this bid item. Excess material generated during pond construction shall be hauled off-site and disposed of by the Contractor at a site provided by the Contractor.

If there are substantial changes in the pond grading, City crews shall survey the area and the difference in Excavation Cut over/under the existing terrain shall be calculated on an in-place basis by the Project Engineer.

All on-site stockpiles shall be enclosed with a silt fence paid under Bid Items 21022, Silt Fence – Provide, Install & Maintain; and 21023, Silt Fence – Remove and Restore. No material is permitted to be stockpiled in the pond, or the wooded areas. The Contractor shall not store Excavation Cut on site, with the exception of topsoil, for periods longer than 1 day, without permission of the Project or Construction Engineer. The Contractor shall be mindful of predicted weather events and remove cut material accordingly. The entire project site serves as a floodplain, and unnecessary material shall not be stored on site.

METHOD OF MEASUREMENT

Excavation Cut within the limits shown in the plan set, or as defined in these Special Provisions, shall be paid based on the "Plan Quantity" without measurement thereof. The plan quantity was computed using the average end area method, based on cross-sections. No changes to this quantity shall be approved unless there are modifications to the plan that result in significant (>10%) increase or decrease in quantity.

BASIS OF PAYMENT

Excavation Cut shall be paid at the contract unit price for the work as described above, which shall be considered full compensation for all labor, materials, equipment, and incidentals necessary to complete this item of work.

BID ITEM 20221: TOPSOIL

DESCRIPTION

This bid item shall include all work, material, equipment, and incidentals required to segregate existing topsoil, stockpile sufficient topsoil for site restoration, and redistribute 6 inches of topsoil over disturbed areas that are not otherwise stabilized or under water.

Based on the boring data included in these special provisions, topsoil is assumed to be 10 inches deep in the pond areas. No borings were taken in the wooded areas adjacent to the channel. Therefore, a topsoil depth of 4 inches is assumed outside of the existing detention basins. Using these assumptions, estimated quantities are:

- Estimated Quantity of Topsoil Generated: 4,552 C.Y.
- Estimated Quantity of Topsoil to be Reused: 2,088 C.Y.
- Plan Quantity for Site Restoration: 12,528 S.Y. (assumed depth of 6")
- Excess Material to be Removed: 2,464 C.Y.

It is anticipated that all necessary topsoil to complete this bid item will be generated on-site; import is not anticipated. The final contours shown on the plan set include 6 inches of topsoil. Grading shall be planned accordingly. No topsoil shall be placed on, or below, the safety bench. Access roads shall be topped with approximately 4 inches of topsoil.

The Contractor and Construction Engineer or Project Engineer shall agree on a method and location for topsoil stockpiling. All areas with the project site are prone to flooding; the stockpile location and associated erosion control shall take this into consideration.

METHOD OF MEASUREMENT

Topsoil shall be measured by the Square Yard, based on "Plan Quantity" without measurement thereof. The quantity was determined by measuring the grading limits and subtracting the water surface area and areas stabilized with stone or ECRM Class II Type C, then adding 5% for overage.

BASIS OF PAYMENT

Topsoil shall be paid at the contract unit price for work as defined above, which shall be considered full compensation for work, materials, labor and incidentals necessary to complete the work.

BID ITEM 20226: LIGHT RIPRAP – GLACIAL FIELD STONE

DESCRIPTION

Work under this item includes all equipment, materials, labor, and incidentals required to provide and install glacial field stone as shown in the plan set and described in these Special Provisions. The stone shall be sized between 6 and 12 inches in diameter. The intent of the varied stone sizes is to create graded stone stabilization at outfalls. Therefore, poorly graded material, approximately within the sizing limits is encouraged.

The material shall be comprised of rounded, durable, glacial till that has been sorted for size and is not susceptible to freeze-thaw degradation. Crushed, blasted, or "made" stone will not be permitted on site.

Prior to placement, the Contractor shall submit sourcing information to the Project Engineer or Construction Engineer. The Project Engineer, or their representative, may choose to evaluate the material at the source prior to acceptance.

Light Riprap shall be placed to a depth of 1-foot, unless otherwise stated. The material shall not be underlain with filter fabric.

Min. Diameter	Median Diameter	Max. Diameter
6"	9"	12"

- Estimated Quantity: 260 Tons
- No Filter Fabric

With the exception of the boulder outfall at Structure S-9, all stone on site shall be placed in a manner that keeps the top of the stone at the channel or bank grade. Stone shall not be elevated from adjacent features.

METHOD OF MEASUREMENT

Light Riprap – Glacial Field Stone shall be measured per Ton of material provided, transported, and placed on site. Tonnage shall be determined by truck tickets or by a method mutually agreed upon by the Contractor and Construction Engineer.

BASIS OF PAYMENT

Light Riprap – Glacial Field Stone shall be measured as described above and shall be paid for at the contract unit price which shall be considered full compensation for all work, materials, equipment, and incidentals necessary to source, transport, and place stone as defined in the plan set and these Special Provisions.

BID ITEM 20404: CLEARING

Work under this bid item shall include all work, equipment, and incidentals necessary to remove trees, brush, and fallen material as shown on Sheet C-1.

TREES TO REMAIN

No tree clearing shall occur between June 1 and July 31.

The Contractor shall note that many trees within the project limits are to remain. These trees are individually identified on Sheet C-1. Each tree on site has been labeled with a metal identification tag containing a unique identifier. The Contractor shall locate the trees to remain and mark them appropriately so that they are not removed.

TREE REMOVAL AND STUMP MANAGEMENT

Any tree or shrub not identified to remain, shall be cut and fully removed from the site, to a location provided by the Contractor. This also applies to any fallen material greater than 4 inches in diameter and 5 feet in length. The Contractor shall haul this material off site and dispose of it appropriately.

- Estimated Quantity of Tree Removal: 590 trees, totaling 6,420 inches DBH (Note: multi-stemmed trees are accounted for in DBH quantities, but not in tree numbers.)

Stumps within the grading limits shall be fully grubbed to accommodate earth moving. Material generated from grubbing shall be the responsibility of the Contractor. The Contractor shall haul this material off site and dispose of it appropriately.

- Estimated Quantity of Trees to be Grubbed: 270 trees, totaling 1,970 inches DBH.

Trees removed outside of the grading limits shall NOT be grubbed. The Contractor shall limit soil disturbance outside of the grading limits, and therefore shall not remove trees or brush in this area by pulling the vegetation, or by pulling stumps. Tree and brush removal outside of the grading limits shall be completed by sawing each tree within 3 inches of the ground surface. The stumps shall be treated with herbicide. The Contractor shall use an herbicide appropriate for the application, and suitable for use near water. The Contractor shall submit proposed herbicides to the Project Engineer for approval prior to use. Herbicide shall be applied to the stumps immediately after cutting. If necessary, the Contractor shall recut the stumps to provide a fresh surface for herbicide application.

- Estimated Quantity of Stumps to be Treated with Herbicide: 308 trees, totaling 3,000 DBH.

PROTECTION OF TREES TO REMAIN

Trees identified to remain shall be protected from damage. Limbing and pruning may be permitted to facilitate adjacent tree removal. Prior to limbing trees to remain, the Contractor shall receive permission from the Project Engineer or Construction Engineer to do so.

Any questions pertaining to tree removal or tree limbing shall be brought to the immediate attention of the Project Engineer.

METHOD OF MEASUREMENT

Clearing shall be measured as a Lump Sum for all work defined in this Special Provision.

BASIS OF PAYMENT

Clearing shall be measured as described above and shall be paid for at the contract unit price which shall be considered full compensation for all work, materials, equipment, and incidentals necessary to remove the trees and brush as described above, grub stumps within the grading limits, treat stumps outside the grading limits, and remove all fallen trees. This bid item also includes hauling all materials off site and disposing of them properly.

BID ITEM 21014: CLEAR STONE BERM (DITCH CHECK)

Work under this bid item shall include all work, equipment, and incidentals necessary to install, maintain, and remove a Clear Stone Ditch Checks, as shown on Sheet EC-1. The ditch checks shall be constructed from Light Riprap, Clear Stone, and Geotextile Filter Fabric, Type SAS Non Woven. These materials shall be paid under the appropriate bid items. The Light Riprap – Glacial Field Stone may be reused at the outfall. Reused stone shall be paid once for provision.

The ditch checks shown on the Erosion Control Plan are all possible ditch checks for the project. Depending on construction phasing, not all ditch checks may be necessary.

The Contractor shall maintain all ditch checks as part of this bid item. This shall include replacement in the event of failure.

METHOD OF MEASUREMENT

Clear Stone Berm (Ditch Check) shall be measured per Each unit constructed, maintained, and removed in the field. Materials used to construct the berm, including Light Riprap, Clear Stone, and Geotextile Filter Fabric, shall be paid separately under the appropriate bid items.

BASIS OF PAYMENT

Clear Stone Berm (Ditch Check) shall be measured as described above and shall be paid for at the contract unit price which shall be considered full compensation for all work, materials, equipment, and incidentals necessary to construct, maintain, and remove the ditch check.

BID ITEM 21061: EROSION CONTROL MATTING, CLASS I, URBAN TYPE A

DESCRIPTION

Material provided for this project shall be certified Weed Free. All other aspects of provision and placement of Erosion Control Matting, Class I, Urban Type A shall be completed in accordance with Article 210 of the Standard Specifications.

METHOD OF MEASUREMENT

Erosion Control Matting Class I Urban Type A shall be measured by the Square Yard. based on "Plan Quantity" without measurement thereof. The quantity was determined by measuring the grading limits and subtracting the water surface area and areas stabilized with stone or ECRM Class II Type C (Bid Item 21073), then adding 5% for overage.

BASIS OF PAYMENT

Erosion Control Matting Class I Urban Type A shall be paid at the contract price for work as defined above, which shall be considered full compensation for work, materials, labor and incidentals necessary to complete the work.

ARTICLE 500

SEWER AND SEWER STRUCTURES GENERAL

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 at the Contractor's responsibility and shall not be compensated.

Connection of new pipes to existing structure shall be accommodated with a Storm Sewer Tap – Bid Item 50792.

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 Project Engineer has been received.

BID ITEM 90030: STORMWATER CONTROL

DESCRIPTION

Work under this item shall include all work, materials, equipment, and incidentals required to control dry and wet weather flow within the channel and pond area for the duration of the project, including any storm sewer rerouting necessary for the sewer installation, pond construction, iron enhanced filter construction, and channel grading. The Contractor shall take all necessary steps to protect the new and existing structures, as well as grading, from damage during construction rain events.

The existing storm channel receives a large amount of water during rain events, including overland flow. The Contractor shall be prepared to manage storm flow and secure construction materials and grading during rain events.

The Contractor shall be prepared to discuss their storm control plan in detail at the pre-construction meeting. Any additional equipment, erosion control devices, stone, etcetera required to manage storm events shall be included with this bid item.

The Contractor shall be aware that any storm sewer dewatering, including trench dewatering or pumping of accumulated storm water, shall include treatment for sediment removal prior to discharge off-site. At a minimum, this treatment shall include filtering the water via a sediment bag prior to discharge. The geotextile bag shall have a 0.040 mm apparent opening size (AOS). If, at the determination of the Construction Engineer, this treatment process is not providing sufficient sediment removal, the Contractor shall add polymer to the sediment bag. These polymers shall comply with the WDOT standards for Polyacrylamide Soil Stabilizers and shall conform to the WDOT's Product Acceptability List (PAL) for Soil Stabilizers, Type B and shall be included in this bid item.

METHOD OF MEASUREMENT

Storm Control shall be measured as a Lump Sum for all storm control necessary throughout construction.

BASIS OF PAYMENT

Storm Control shall be measured as described above and shall be paid at the contract unit price, which shall be considered full compensation for all labor, materials, equipment, and incidentals necessary to

control storm flows, divert stormwater, and treat stormwater prior to discharge for the duration of the project.

BID ITEM 90031: GROUNDWATER CONTROL/SITE DEWATERING

DESCRIPTION

Work under this item shall include all work, materials, equipment, permitting, and incidentals required to dewater the site during construction or to work with the water on-site in a manner that is acceptable to the Contractor, and allows the project to be constructed in accord with these plans and specifications.

No masonry shall be installed in water nor shall water be allowed to rise over masonry or concrete if there is danger of flotation or of setting up unequal pressures in the concrete until the concrete has set at least 24 hours and any danger of flotation has been removed.

The Contractor shall be responsible for designing a dewatering plan to fit his/her construction methods and for permitting said plan if that is required. The Contractor shall submit a dewatering plan for approval prior to beginning dewatering activities. The plan shall include proposed sediment control measures to be used during dewatering.

If necessary the Contractor shall obtain, from the Wisconsin Department of Natural Resources (WDNR), in accordance with Paragraph 144.025(2)(e), Wisconsin Statutes, permits for all groundwater control wells which singly or in aggregate produce 70 or more gallons per minute. All wells shall be drilled and sealed in accordance with requirements of the WDNR for installing and abandoning wells. The address for obtaining well permits is:

Wisconsin Department of Natural Resources
Private Water Supply Section
BOX 7921
Madison, Wisconsin 53707

The Contractor shall be solely responsible for choosing a method of groundwater control that is compatible with the constraints defined in this section. The Contractor shall be responsible for the adequacy of the groundwater control system and shall take all necessary measures to insure that the groundwater control operation will not endanger or damage any existing adjacent utility or structure.

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

The Contractor shall maintain dewatering activities until the pond is filled.

Borings are provided at the end of the Special Provisions to assist the Contractor in determining what methods are required to dewater the site.

METHOD OF MEASUREMENT

Groundwater Control shall be measured as a Lump Sum for all dewatering necessary throughout construction.

BASIS OF PAYMENT

Groundwater Control shall be paid for at the contract unit price, which shall be full compensation for all work as outlined in the description.

BID ITEM 90032: 6' X 10' STORM STRUCTURE W/ INTERNAL WEIR

DESCRIPTION

Work under this item includes construction of a new 6' x 10' field-poured structure, providing and installing two (2) castings (R-5900-E) setting and adjustment of the castings to the grade specified in the plan set or as directed in the field. The 6' x 10' field poured structure shall have steel reinforcement and wall dimensions as shown on Sheet D-4.

The Contractor shall either use epoxy coated steel for all reinforcement or shall provide concrete mix that is made with XYPEX C-1000 in accord with the manufactures recommendations. The option is the Contractors. Decision shall be document in writing to the City of Madison Construction Engineer.

The minimum compressive strength at twenty-eight (28) days for all concrete used on this item shall be four thousand (4000) pounds per square inch.

METHOD OF MEASUREMENT

6' x 10' Storm Structure w/ Internal Weir shall be measured by Each unit constructed in the field and approved by the Construction Engineer or Project Engineer.

BASIS OF PAYMENT

6' x 10' Storm Structure w/ Internal Weir shall be paid for at the contract unit price, which shall be considered full compensation for construction of the structure described above.

BID ITEM 90033: 6' X 14' STORM STRUCTURE

DESCRIPTION

Work under this item includes construction of a new 6' x 14' field-poured junction structure, providing and installing two (2) castings (R-5900-E) setting and adjustment of the castings to the grade as called out in the plan set or as directed in the field. The structure shall contain an internal weir as shown on Sheet D-3. Steel reinforcement shall be constructed per Sheet D-3

The Contractor shall either use epoxy coated steel for all reinforcement or shall provide concrete mix that is made with XYPEX C-1000 in accord with the manufactures recommendations. The option is the Contractors. Decision shall be document in writing to the City of Madison Construction Engineer.

The minimum compressive strength at twenty-eight (28) days for all concrete used on this item shall be four thousand (4000) pounds per square inch.

METHOD OF MEASUREMENT

6' x 14' Storm SAS w/ Internal Weir shall be measured by Each unit constructed in the field and approved by the Construction Engineer or Project Engineer.

BASIS OF PAYMENT

6' x 14' Storm SAS w/ Internal Weir shall be paid for at the contract unit price, which shall be considered full compensation for construction of the structure described above.

BID ITEM 90034: GALVANIZED STEEL GUARDRAIL

DESCRIPTION

Work under this item shall include all work, materials, labor and incidentals necessary to install a steel guardrail along the face of Structure S-9, as shown on Sheets D-2 and D-3.

The guard rail shall consist of the following:

- 1-1/2" I.D., Schedule 40, galvanized steel posts and railings, ASTM A53 Grade B
- ASTM A36 Base Plates
- 3/8" Diameter, SS Adhesive Anchors, 4" embedment depth
- Welds shall be 3/16" fillet welds, comprised of E70xx

The horizontal rails and members shall be flat or level and centered on the face of the structure. Final railing shall be free of spurs.

METHOD OF MEASUREMENT

Galvanized Steel Guard Rail shall be measured per Linear Foot of rail installed.

BASIS OF PAYMENT

Galvanized Steel Guard Rail shall be measured as described above and paid at the contract unit price, which shall be full compensation for providing, placing, maintaining, and removing the fencing.

BID ITEM 90035: BOULDERS

DESCRIPTION

Work under this item includes all equipment, materials, labor, and incidentals required to provide and install glacial field stone as shown in the plan set and described in these Special Provisions. The stone shall be sized between 14 and 22 inches in diameter. The intent of the varied stone sizes is to create graded stone stabilization at outfalls.

The material shall be comprised of rounded, durable, glacial till that has been sorted for size and is not susceptible to freeze-thaw degradation. Crushed, blasted, or "made" stone will not be permitted on site.

Prior to placement, the Contractor shall submit sourcing information to the Project Engineer or Construction Engineer. The Project Engineer, or their representative, may choose to evaluate the material at the source prior to acceptance.

Boulders shall be placed 1.5 or 2 feet thick, approximately 1-stone depth. The material shall be underlain with Riprap Filter Fabric, Type HR. Fabric shall be paid separately. Filter fabric shall be placed in a manner that prevents excess material from showing beyond the boulder limits.

Min. Diameter	Median Diameter	Max. Diameter
14"	18"	22"

- Estimated Quantity: 122 Tons
- Geotextile Filter Fabric, Type HR (*Paid Under Bid Item 20233*)
- Contractor may use 3 Inch Clear Stone to set boulder outfall at Structure S-9. Material shall be paid separately.

Existing conditions at the site include areas of useable stone. The Contractor may elect to salvage and reuse existing stone material. In this case, the Contractor, Project Engineer, and Construction Engineer

will approximate the tonnage of stone based on stone area, a specific gravity of 2.8, and a void space of approximately 25%.

With the exception of the boulder outfall at Structure S-9, all stone on site shall be placed in a manner that keeps the top of the stone at the channel or bank grade. Stone shall not be elevated from adjacent features.

METHOD OF MEASUREMENT

Boulders shall be measured per Ton of material provided, transported, and placed on site. Tonnage shall be determined by truck tickets.

BASIS OF PAYMENT

Boulders shall be measured as described above and shall be paid for at the contract unit price which shall be considered full compensation for all work, materials, equipment, and incidentals necessary to source, transport, and place stone as defined in the plan set and these Special Provisions.

BID ITEM 90036: RIVER COBBLES

DESCRIPTION

Work under this item includes all equipment, materials, labor, and incidentals required to provide and install glacial field stone as shown in the plan set and described in these Special Provisions. The stone shall be sized between 2 and 6 inches in diameter. The intent of the varied stone sizes is to create graded stone stabilization at outfalls. Therefore, poorly graded material, approximately within the sizing limits is encouraged.

The material shall be comprised of rounded, durable, glacial till that has been sorted for size and is not susceptible to freeze-thaw degradation. Crushed, blasted, or "made" stone will not be permitted on site.

Prior to placement, the Contractor shall submit sourcing information to the Project Engineer or Construction Engineer. The Project Engineer, or their representative, may choose to evaluate the material at the source prior to acceptance.

River Cobbles shall be placed in a layer 8-inches thick. With the exception of the boulder outfall at Structure 9, all stone on site shall be placed in a manner that keeps the top of the stone at the channel or bank grade. Stone shall not be elevated from adjacent features.

Min. Diameter	Median Diameter	Max. Diameter
2"	4"	6"

- Estimated Quantity: 185 Tons
- No Filter Fabric

METHOD OF MEASUREMENT

River Cobbles shall be measured per Ton of material provided, transported, and placed on site. Tonnage shall be determined by truck tickets.

BASIS OF PAYMENT

River Cobbles shall be measured as described above and shall be paid for at the contract unit price which shall be considered full compensation for all work, materials, equipment, and incidentals necessary to source, transport, and place stone as defined in the plan set and these Special Provisions.

BID ITEM 90037: IRON ENHANCED FILTER

DESCRIPTION

Work under this item includes construction of the Iron Enhanced Filter as defined in the plan set. This bid item includes the provision and placement of the iron enhanced media. Underdrain materials, geotextile filter fabric, and surface stones shall be paid under the appropriate bid items.

MATERIALS

The Iron Enhanced Filter shall be constructed with the following materials.

- Geotextile Filter Fabric Type SAS Non Woven:
 - Estimated Quantity: 1,310 S.Y. (*Paid Under Bid Item 20140*)
- 4" Corrugated, Flexible, Polyethylene pipe with pre-cut slits. Pipe with pre-drilled holes will not be permitted.
 - Estimated Quantity: 750 L.F. (*Paid Under Bid Item 90038*)
- Schedule 40 PVC Risers and appropriate connectors or junctions to construct cleanouts for the underdrain pipe.
 - Estimated Quantity: 20 L.F. (*Paid Under Bid Item 90044*)
- Pea-gravel
 - Estimated Quantity: 28 C.Y. or 56 Ton (*Paid Under Bid Item 90038*)
- ASTM C33 Sand, or Engineer Approved Equivalent:
 - Estimated Quantity: 471 C.Y. or 1036 Ton
- Elemental Iron, Sizing Equivalent to ASTM C33 Sand, elemental iron and sand will be fully integrated prior to placement.
 - Estimated Quantity: 35 C.Y. or 105 Ton
- River Cobbles
 - Estimated Quantity: 8-9 C.Y. or 14.5 Ton (*Paid Under Bid Item 90036*)
- Boulders
 - Estimated Quantity: 102 stones, or 30 Ton (*Paid Under Bid Item 90035*)

Elemental Iron shall be sourced from Connelly –GPM Inc., or from an Engineer approved equivalent.

Connelly-GPM Inc.
3154 South California Ave.
Chicago, IL 60608
Ph: (773) 247-7231

CONSTRUCTION

The Contractor shall excavate the Iron Enhanced Filter (IEF) bed to the lines and grades shown on the plan set. Filter fabric shall be placed in accordance with manufacturer's recommendations and without gaps or tears.

Filter underdrain pipes shall be placed as shown in the plan set, approximate 20-feet apart, and shall run the length of the IEF. Underdrains shall be sloped at approximately 0.5%. This can be achieved by either sloping the bed of the IEF, or by sloping pipe bedding. Cleanouts shall be placed at underdrain ends, or where multiple pipes join.

Filter underdrains shall be covered with a layer of pea-gravel that will serve as a gradation filter for the sand. Pea gravel depths shall not exceed 1-foot total, including pipe diameter.

The iron enhanced filter media shall consist of ASTM C33 sand mixed with elemental iron. The mixing rate shall be 5-8% iron by volume. The media shall be thoroughly and completely mixed. Mixing off-site is acceptable, and preferred, if it can occur in a controlled environment. If mixed on-site, the media shall be mixed via a minimum of 20 passes in each direction with a rototiller. Media shall be placed in lifts that are appropriate for thorough rototiller mixing.

The Contractor shall keep the IEF media clean and dry until placement occurs.

The Contractor shall keep the IEF off-line until all surrounding banks and contributing areas have been fully stabilized, with the exception of the trucking route for the media. If the Contractor does not maintain the material in good condition prior to the IEF coming on-line, the media shall be replaced at no additional cost to the City.

River Cobbles shall be placed at the pipe outfall to stabilize the sand. Boulders shall be placed to serve as a flow separator and for aesthetic purposes. Therefore, the placement of the boulders will be directed by the Engineer. Boulders shall be individually placed in an orderly manner.

Pricing, field conditions, and other factors may impact the ultimate size of the IEF. Quantities of this bid item may be altered. Alterations of this bid item quantity shall not result in a revision of the contract unit price.

METHOD OF MEASUREMENT

Iron Enhanced Filter shall be measured per Square Foot of surface area fully constructed in the field and approved by the Construction Engineer or Project Engineer.

BASIS OF PAYMENT

Iron Enhanced Filter shall be measured and paid at the contract unit price, which shall be considered full compensation for construction of the IEF, including provision and placement of the sand and elemental iron. Excavation Cut, Geotextile Filter Fabric, Filter Underdrain, River Cobbles, and Boulders shall all be paid separately, under the appropriate bid items.

BID ITEM 90038: FILTER UNDERDRAIN

DESCRIPTION

Work under this bid item includes the provision and placement of underdrain pipes within the Iron Enhanced Filter. This bid item shall include all materials, labor, equipment, and incidentals necessary to place the underdrain pipes.

- 4" Corrugated, Flexible, Polyethylene pipe with pre-cut slits. Pipe with pre-drilled holes will not be permitted.
 - Estimated Quantity: 750 L.F.
- Pea-gravel
 - Estimated Quantity: 28 C.Y., or 56 Ton

Filter underdrain pipes shall be placed as shown in the plan set, approximate 20-feet apart, and shall run the length of the IEF. Underdrains shall be sloped at approximately 0.5%. This can be achieved by either sloping the bed of the IEF, or by sloping pipe bedding. Cleanouts shall be placed at underdrain ends, or where multiple pipes join.

Filter underdrains shall be covered with a layer of pea-gravel that will serve as a gradation filter for the sand. Pea gravel depths shall not exceed 1-foot total, including pipe diameter.

METHOD OF MEASUREMENT

Filter Underdrain shall be measured per Linear Foot constructed in the field and approved by the Construction Engineer or Project Engineer.

BASIS OF PAYMENT

Filter Underdrain shall be paid for at the contract unit price, which shall be considered full compensation for construction of the structure described above.

BID ITEM 90039: INFILTRATION TRENCH

DESCRIPTION

Per the soil borings, included in these Special Provisions, a sand layer was encountered approximately 5-feet below grade in the vicinity of the IEF and soil boring B-1. The intent of this bid item is to construct a conduit to that layer, to the extent that the sand layer can be located.

The Contractor shall begin excavation in the vicinity of soil boring B-1. If the sand layer is encountered within a 5-foot depth, the Contractor shall continue to excavate the trench. If the sand layer is not encountered, excavation shall be terminated and the pit shall be backfilled.

The trench length shall be determined by the extent of the sand layer, or no longer than 100 feet. Trench width shall be approximately 10-feet.

Geotextile Filter Fabric Type SAS Non-Woven shall be placed along the perimeter of the trench, and the excavation shall be backfilled with 3-inch Clear Stone. Both of these materials shall be paid under the appropriate bid items.

METHOD OF MEASUREMENT

Infiltration Trench shall be measured per Trench Foot constructed in the field and approved by the Construction Engineer or Project Engineer.

BASIS OF PAYMENT

Infiltration Trench shall be paid for at the contract unit price, which shall be considered full compensation for construction of the structure described above.

BID ITEM 90040: CLAY LINER PROVISION AND PLACEMENT

DESCRIPTION

This item includes all work necessary to provide and place a 2-foot clay liner (finish depth) in the pond areas below the permanent pool, as shown in the typical sections. Excavation of the in-situ soil to accommodate the clay liner placement is paid under Bid Item 20101 – Excavation Cut. The top of the clay liner shall have a finish grade as shown in the plan set.

The estimated clay quantity was determined by using the average end area method for a 2-foot layer.

- Estimated Quantity: 2,024 cy

The clay liner shall be placed in lifts. The thickness of each lift before compaction shall not exceed the length of the teeth of the footed compactor used.

Soils used in clay liner construction shall have a minimum plasticity index of 12 as tested by

Atterberg Limit tests (ASTM D-4318), a minimum of 50% passing the number 200 sieve, and a recompacted in-place permeability as specified on the construction plans.

Clay materials shall contain no sod, brush, roots, frozen soil, or other perishable materials. Rock particles larger than 3 inches shall be removed prior to compaction of the clay.

Pond surfaces shall be graded to remove surface irregularities and shall be scarified or otherwise acceptably scored or loosened to a minimum depth of 2 inches. The moisture content of the loosened material shall be controlled as specified for the clay liner, and the surface materials shall be compacted and bonded with the first layer of the clay liner as specified for subsequent layers of clay liner.

The clay liner shall not be placed until the required foundation preparation has been completed and the foundation has been inspected and approved by the Construction Engineer. The clay liner shall not be placed upon a frozen surface, nor shall snow, ice, or frozen material be incorporated in the clay liner.

The distribution of materials throughout the clay liner shall be essentially uniform, and the clay liner shall be free from lenses, pockets, streaks, or layers of material differing substantially in texture, moisture content, or gradation from the surrounding material.

If the surface of any layer becomes too hard and smooth for proper bond with the succeeding layer, it shall be scarified to a depth of not less than 2 inches before the next layer is placed.

During placement and compaction of the clay liner, the moisture content of the clay being placed shall be maintained above optimum moisture as determined by the Standard Proctor Test (ASTM D-698) or Modified Proctor Test (ASTM D-1557).

The application of water to the clay shall be accomplished at the borrow areas insofar as practicable. Water may be applied by sprinkling the clay after placement and before compaction of the liner, if necessary. Uniform moisture distribution shall be obtained by disking.

The clay liner shall be compacted to a minimum of 95% of standard proctor dry density (ASTM D-698) or to a minimum of 90% of modified proctor dry density (ASTM D-1557), at a moisture content above optimum moisture.

The clay liner shall be compacted with a footed compactor weighing at least 25,000 pounds, operated continuously, in uncompacted lift thicknesses not to exceed the smaller of 6 inches or the length of the teeth on the footed compactor used. The lifts shall be compacted to a level of permeability equal to or less than 1×10^{-7} cm/sec with suitable equipment.

Clay placed at densities lower than the specified minimum density or at moisture contents lower than optimum moisture content or otherwise not conforming to the requirements of the specifications shall be reworked to meet the specifications or removed and replaced by acceptable clay. The replacement clay and the foundation and fill surfaces upon which it is placed shall conform to all requirements of this specification for foundation preparation, approval, placement, moisture control, and compaction.

The Contractor shall maintain dewatering activities until the pond is filled.

TESTING AND DOCUMENTATION REQUIREMENTS

Liner construction shall be tested and documented as specified below. Copies of the documentation report, including test locations and test results, shall be provided to Construction Engineer.

Field and laboratory soil tests shall be completed on the clay liner, by a third party engineering firm retained by the City, to document compliance with this specification. Testing shall be completed as the liner is being placed. The Contractor shall accommodate access and scheduling of this work, including potential delays if a representative is not immediately available. The following tests shall be completed at the specified frequency.

Standard Proctor test:

ASTM D-698 - 1 per 500 cubic yards of clay liner or

Modified Proctor Test

ASTM D-1557 - 1 per 500 cubic yards of clay liner

Field Density Tests

ASTM D-2922, D-2167, D-1556, or D-2937 - 1 test per 100 square foot of clay liner

Atterberg Limit tests

ASTM D-4318 - 1 per 500 cubic yards of clay liner

Grain Size Distribution

ASTM D-422 - 1 per 500 cubic yards of clay liner

Permeability

ASTM D-5084 - 1 per 500 cubic yards of clay liner

Atterberg limits, grain size distribution, and permeability tests shall be completed on undisturbed samples obtained from the constructed clay liner. A minimum of one of each of the laboratory tests specified above shall be completed per clay liner.

All test holes shall be backfilled using powdered bentonite mixed with clay soil used in liner construction and compacted by hand tamping. The clay shall be broken down into clods less than ½ inch in diameter. A minimum of 25% of the backfilled test hole volume shall be occupied by powdered bentonite after backfilling.

METHOD OF MEASUREMENT

Clay Liner Provision and Placement shall be measured by the Cubic Yard based on plan quantity, without measurement thereof. The quantity listed on the Proposal Page was calculated using the average end area method for a 2-foot layer of clay below the permanent water pool elevation (top of safety bench to top of safety bench).

BASIS OF PAYMENT

Clay Liner Provision and Placement shall be measured as defined above and paid at the contract unit price, which shall be full payment for all work as laid out in the description.

BID ITEM 90041: POLYMER SETTLING

DESCRIPTION

Work under this item shall include provision and proper application of polymer flocculants to settle sediment from stormwater during construction, or within the pond following construction. The selected polymer shall be environmentally benign; harmless to fish, wildlife, and plants; as well as non-toxic and non-combustible at the rate of application specified by the manufacturer. Asphalt based products will not be approved for use. Only products approved for field-testing, and field-tested by WDOT will be approved for use.

Polyacrylamide Soil Stabilizers shall conform to the WDOT's Product Acceptability List (PAL) for Soil Stabilizers, Type B.

Polymer shall be applied in conformance with WDNR Storm Water Construction Technical Standard 1051 for Water Application of Polymers. Application shall be completed using conventional hydraulic seeding equipment or dry spreading. Application rates shall be as recommended by the manufacturer and shall

meet the approval of the Construction Engineer. In general, rate of application shall be 20 lbs./acre. The total surface area is 0.61 acres.

- Estimated Quantity: 13 pounds

METHOD OF MEASUREMENT

Polymer Settling shall be measured by Pounds of material supplied and applied.

BASIS OF PAYMENT

Polymer Settling shall be measured as described above and paid for at the contract price shall be full compensation for all work, materials and incidentals to complete the work in accordance with the description.

BID ITEM 90042: TRASH SEGREGATION AND DISPOSAL

DESCRIPTION

The site contains a significant amount of surface trash, including tires and plastics. It is not believed that trash material exists below grade, or beyond what is visible. This bid item includes all labor, equipment, and incidentals necessary to segregate, collect, haul, and dispose of trash on the project site to a location provided by the Contractor.

It is the intent of this bid item to provide a means for managing large debris, or debris that impacts reuse of surface material. It is not the intent of this bid item to require the Contractor to remove all trash from the site.

METHOD OF MEASUREMENT

Segregation and Disposal of Trash shall be measured as a Lump Sum for material collected, hauled, appropriately disposed at a location provided by the Contractor, and all associated fees.

BASIS OF PAYMENT

Segregation and Disposal of Trash shall be measured as described above and paid at the contract unit price, which shall be full compensation for completing work described in this bid item.

BID ITEM 90043: TEMPORARY CONSTRUCTION FENCING

DESCRIPTION

Work under this item shall include all work, materials, labor and incidentals necessary for the Contractor to provide, install, maintain and remove construction fence at the direction of the Construction Engineer or Project Engineer. The fence will only be placed on an as-needed basis to protect residents from entering the site, or to protect trees.

This fence shall be highly visible (orange or yellow), constructed of a plastic web, and able to withstand the expected amount of use it will receive on a construction site. The intent of this item is to delineate the area to which the Contractor shall confine his or her operations, to protect trees, and to prevent disturbance of areas by the public following seeding operations. Minor relocation of fencing may be required as the work progresses. No extra payment shall be made for temporarily opening and re-closing the fence, or minor relocation of the fencing as needed to perform the work.

Construction fencing shall be International Orange color, high-density polyethylene mesh conforming to the following:

- Mesh opening: 1 inch minimum to 3 inch maximum
- Height: 4 feet
- Ultimate tensile strength: Avg 3000lb per 4' width (ASTM D638)

METHOD OF MEASUREMENT

Temporary Construction Fencing shall be measured by the Linear Foot of fence installed, maintained, and removed.

BASIS OF PAYMENT

Temporary Construction Fencing shall be measured as described above and paid at the contract unit price, which shall be full compensation for providing, placing, maintaining, and removing the fencing.

BID ITEM 90044: FILTER UNDERDRAIN CLEANOUT

DESCRIPTION

Work under this item shall include all labor, materials, equipment, and incidentals necessary to construct cleanouts on the filter underdrain pipes, as shown in the plan set.

The clean outs shall be placed at ends and pipe connections of the filter underdrain. The cleanouts shall extend approximately 4 to 6 inches above the IEF sand media. All pipe cuts shall be clean, level, and uniform. All pipe joints and connections shall be gasketed or glued. All connectors shall be designed to join corrugated polyethylene and PVC. Cleanouts shall be capped with a gasketed cap.

- Schedule 40 PVC Risers and appropriate connectors or junctions to construct cleanouts for the underdrain pipe.
 - Estimated Quantity: 5 Cleanouts and approximately 20 L.F.

METHOD OF MEASUREMENT

Filter Underdrain Cleanout shall be measured per Each unit fully constructed in the field and approved by the Construction Engineer or Project Engineer.

BASIS OF PAYMENT

Filter Underdrain Cleanout shall be measured and paid at the contract unit price, which shall be considered full compensation for the bid item.

BID ITEM 90045: QUICK GROW SEED MIX

DESCRIPTION

Work under this bid item shall include all labor, materials, equipment, and incidentals necessary to provide, store, and place Quick Grow Seed Mix as defined in this section. All seeding activities shall occur in accordance with Article 207 of the Standard Specifications and in accordance with the supplier's recommendations. Quick Grow Seed Mix shall be considered a native seed and shall be supplied as Pure Live Seed, and stored and placed accordingly.

Quick Grow Mix includes the species listed below. Substitutions may be acceptable depending on seed availability, and shall be approved by the Engineer prior to placement. Seeding rate shall be approximately 10 pounds per acre. Individual species seeding rates shall be determined by the supplier.

The seed mix defined in this specification is available from Agrecol as the standard seed mix:

City of Madison Aggressive Species Mix.

Agrecol
10101 N. Casey Rd
Evansville, WI
(608) 223-3571)

Tall Forbs

Sawtooth sunflower (*Helianthus grosseserratus*)
Ox-eye sunflower (*Heliopsis helianthoides*)
Glade mallow (*Napea dioica*)
Cup plant (*Silphium perfoliatum*)
Old field thistle (*Cirsium discolor*)
Evening primrose (*Oenothera biennis*)
Ironweed (*Vernonia fasciculata*)
Gray-headed coneflower (*Ratibida pinnata*)
Bergamot (*Monarda fistulosa*)
Purple coneflower (*Echinacea purpurea*)
Sneezeweed (*Helenium autumnale*)
Cow parsnip (*Heracleum maximum*)

Tall Grasses

Indian grass
Prairie cordgrass (*Spartina pectinata*)
Big bluestem (*Andropogon gerardii*)
Canada wild rye (*Elymus canadensis*)
Switchgrass (*Panicum virgatum*)

Short Forbs

Mountain mint (*Pycnanthemum virginianum*)
Grass-leaved goldenrod (*Solidago graminifolia*)
Showy sunflower (*Helianthus pauciflorus*)
Brown-eyed Susan (*Rudbeckia triloba*)
Northern bedstraw (*Gallium boreale*)
Evening primrose (*Oenothera biennis*)
Frost aster (*Symphyotrichum pilosum*)
Bergamot (*Monarda fistulosa*)
Purple coneflower (*Echinacea purpurea*)
Northern bedstraw (*Gallium boreale*)
Sneezeweed (*Helenium autumnale*)
Shrubby St. John's wort (*Hypericum prolificum*)

Short Grasses

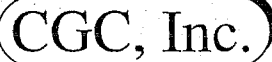
Canada bluejoint grass (*Calamagrostis canadensis*)
Virginia wild rye (*Elymus virginicus*)
Side oats grama (*Bouteloua curtipendula*)

METHODS OF MEASUREMENT

Quick Grow Seed Mix shall be measured per Square Yard of seed placed on site based on "Plan Quantity" without measurement thereof. The quantity was determined by measuring the grading limits and subtracting the water surface area and areas stabilized with stone or ECRM Class II Type C, then adding 5% for overage.

BASIS OF PAYMENT

Quick Grow Seed Mix shall be measured as described above and shall be paid at the contract price, which shall be considered full compensation for all labor, equipment, materials and incidentals necessary to provide, store, and place seed in accordance with Article 207 of the Standard Specifications and supplier's recommendations.



Construction • Geotechnical
Consulting Engineering/Testing

October 11, 2017
C17051-20

Ms. Sally Swenson
City of Madison Engineering Dept.
City-County Building, Room 115
210 Martin Luther King, Jr. Blvd.
Madison, WI 53703-3345

Re: Geotechnical Exploration Report
Proposed Spring Harbor Pond
Madison, Wisconsin

Dear Ms. Swenson:

Construction • Geotechnical Consultants, Inc. (CGC) has completed the subsurface exploration for the above-referenced project. We understand the proposed project would include installing a pond within Nautilus Park near the intersection of Mineral Point Road and Nautilus Drive. It is also our understanding that the pond would serve primarily as a detention basin for storm water runoff prior to entering the Yahara River watershed. Additional details of pond construction (including depths) are unknown at this time. The primary purpose of this exploration was to identify surficial soils within the proposed pond area. An electronic copy of this report is being transmitted, and a paper copy can be provided upon request.

SUBSURFACE EXPLORATION

The subsurface conditions in the area of proposed construction were explored by drilling 6 Standard Penetration Test (SPT) borings to depths ranging from 10 to 20 ft below ground surface within the proposed project area. Boring locations were determined by the City of Madison and staked in the field by CGC personnel. The borings were performed by Badger State Drilling (under subcontract to CGC) on August 9, 2017, using an all-terrain Diedrich D-50 drill rig. The specific procedures used for drilling and sampling are described in Appendix A.

SITE CONDITIONS

The subsurface profile revealed by the borings is significantly variable. A generalized soil profile in the project area can be summarized (in descending order) as:

- 8 to 11 in. of **topsoil** (considered to be fill at B3)
- 4.5 to 19 ft of lean to silty **clay** (*beneath 2.5 ft of variable fill materials at B3 and interrupted by a 2.5 ft layer of sand at B4*)
- 14 ft of **sand** with variable silt/clay and gravel contents (B1 only)

Ms. Sally Swenson
City of Madison Engineering Dept.
October 11, 2017
Page 2

Note groundwater was encountered between 7.9 and 13.5 ft below existing grades at B4, B5 and B6. Groundwater levels are anticipated to fluctuate based on variations in precipitation, infiltration, nearby lake/stream stages, as well as other factors. For a more detailed description of the site soil and groundwater conditions please refer to the boring logs attached in Appendix B.

Pond Construction

Pond depths and other related construction items were unavailable at the time of this submittal. In our opinion, the pond should be designed with a minimum 2-ft thick clay liner if it is desired to maintain a somewhat constant water surface elevation independent of natural groundwater level fluctuations. Should water level fluctuations not be an important element pertaining to pond design/performance, then the pond could simply be cut to depth without subsequent liner construction. We recommend that temporary shallow monitoring wells be installed to further evaluate existing groundwater levels, which could greatly influence pond constructability.

Depending on overall depth and the relationship to natural groundwater, dewatering could be necessary during construction *and afterward until the pond is filled*. CGC can elaborate on construction methodology upon request when additional pond details become available.

If the chosen option, we recommend that construction of a clay liner involve the placement of three lifts of clay each compacted to a minimum 90% compaction based on modified Proctor methods (ASTM D1557). The final thickness of the liner should be a minimum of 2 feet after compaction and final grading. Note that all of the borings encountered clay materials at relatively shallow depths; however, softer consistencies within some of the *native* clay strata could potentially make processing more difficult. Natural moisture contents were obtained from clay samples recovered within the upper 10 ft of each boring and are included on the individual logs. In areas where the excavation depth coincides with native clay soils the final liner thickness could include "credit" of native clay for the lower 1 ft to achieve the ultimate goal of a 2-ft thick liner *provided it is disked/aerated and subsequently compacted until a firm surface is achieved based on little deflection beneath the compactor* (which is dependent on field confirmation at the time of construction). The variable fill materials containing sand and clay, as well as native sands, are not suitable pond liner material.

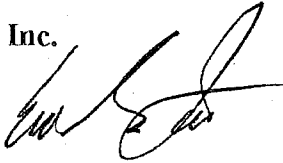
Ms. Sally Swenson
City of Madison Engineering Dept.
October 11, 2017
Page 3

CLOSING REMARKS

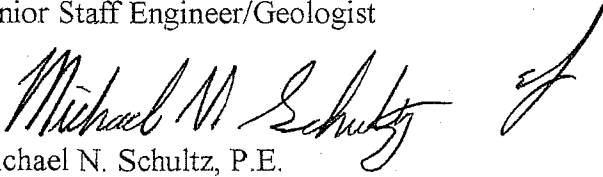
We wish to reiterate that dewatering may be necessary during pond construction due to the presence of groundwater. Other information regarding this report and its limitations is included in Appendix C. It has been a pleasure to serve you on this project. If you have any questions or need additional consultation, please contact us.

Sincerely,

CGC, Inc.



Eric S. Fair
Senior Staff Engineer/Geologist



Michael N. Schultz, P.E.
Principal/Senior Consulting Professional

Encl: Appendix A - Field Exploration
Appendix B - Soil Boring Location Exhibit
Logs of Test Borings (6)
Log of Test Boring-General Notes
Unified Soil Classification System
Appendix C - Document Qualifications

cc: Ms. Johanna Johnson, City of Madison Engineering Division

APPENDIX A

FIELD EXPLORATION

APPENDIX A

FIELD EXPLORATION

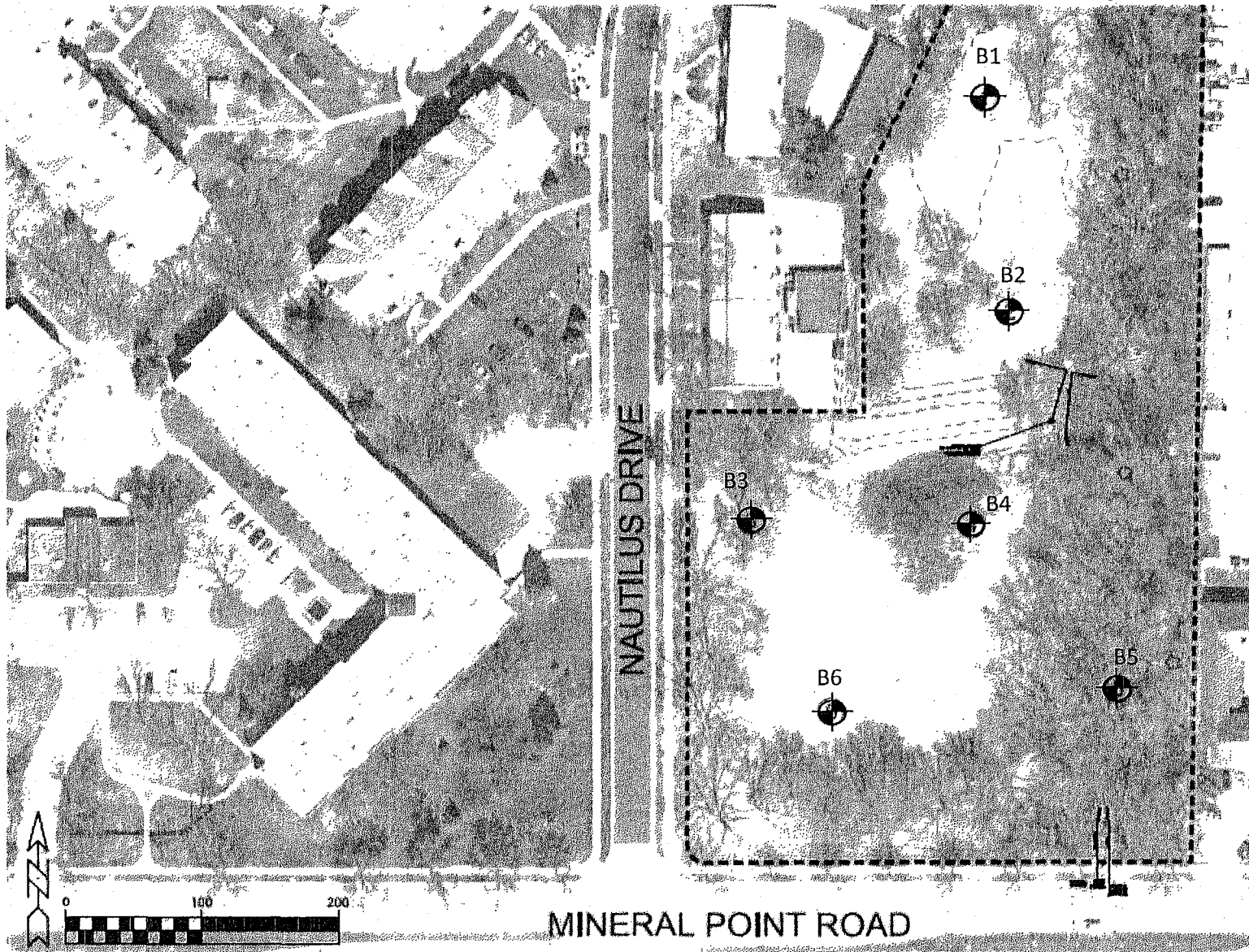
The subsurface conditions in the areas of the project were explored by drilling 6 SPT soil borings to depths of 10 to 20 ft at locations determined by the City of Madison which are shown in plan on the soil boring location exhibit presented in Appendix B.

The soil borings were performed by Badger State Drilling using an all-terrain, rotary Dietrich D-50 drill rig. The SPT method consists of driving a 2-inch outside diameter split-barrel sampler using a 140-pound weight falling freely through a distance of 30 inches. The sampler is first seated 6 inches into the material to be sampled and then driven 12 inches. The number of blows required to drive the sampler the final 12 inches is recorded on the log of borings and is known as the Standard Penetration Resistance (commonly referred to as the N-value).


During the field exploration, the driller visually classified the soil and prepared a field log. *Field screening of the samples for possible environmental contaminants was not conducted by the drillers, as such activities were not part of CGC's work scope.* Water level observations were made in each boring during (and after when possible) drilling and are shown at the bottom of each boring log. Upon completion of drilling, the borings were backfilled with bentonite in accordance with WDNR regulations, and the soil samples were delivered to our laboratory for visual classification and possible laboratory testing. The soils were visually classified by CGC and reviewed by a geotechnical engineer using the Unified Soil Classification System. The final logs prepared by the engineer and a description of the Unified Soil Classification System are presented in Appendix B.

APPENDIX B

**SOIL BORING LOCATION EXHIBIT
LOGS OF TEST BORINGS (6)
LOG OF TEST BORING – GENERAL NOTES
UNIFIED SOIL CLASSIFICATION SYSTEM**



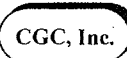
Legend

 Denotes Boring Location

Notes

1. Soil borings performed by Badger State Drilling in August 2017
2. Boring locations are approximate.

Scale: Reduced

Date: 8/2017	
Job No. C17051-20	

Soil Boring Location Exhibit
Proposed Spring Harbor Pond
Madison, WI



LOG OF TEST BORING

Project Proposed Spring Harbor Pond
 Location Madison, WI

Boring No. 1
 Surface Elevation (ft) 997±
 Job No. C17051-20
 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)		q _u (tsf)	W	LL	PL	LI
					10 in. TOPSOIL					
1	10	M	11		Medium Stiff to Stiff, Gray to Brown Lean CLAY (CL) <i>USDA: 10YR 4/2 Silty Clay Loam</i>	(1.0)	31.5			
2	18	M	12		Very Stiff, Brown/Gray Lean CLAY (CL) <i>USDA: 10YR 5/6 Silty Clay Loam</i> <i>(Redox: C3D N5/1)</i>	(2.5)	27.7			
3	18	M/W	8		Loose to Very Loose, Brown/Gray (Mottled) Clayey Fine to Medium SAND, Some Silt (SC) <i>USDA: 10YR 4/4 Sandy Clay Loam</i> <i>(Redox: C2D 10YR 5/2)</i>					
4	18	M/W	5							
5	18	M/W	5							
6	18	M/W	4							
7	12	M/W	24		Medium Dense to Loose, Brown Fine to Medium SAND, Some Silt and Gravel, Scattered Cobbles/Boulders, Trace Clay (SM) <i>USDA: 10YR 4/4 Gravelly Sandy Loam</i>					
8	15	M/W	9							
				20	End of Boring at 20 ft					
					Borehole Backfilled with Bentonite Chips					
				25						

WATER LEVEL OBSERVATIONS

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

GENERAL NOTES

Start 8/9/17 End 8/9/17
 Driller BSD Chief DB Rig D-50
 Logger MG/CD 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 Proposed Spring Harbor Pond
 Location Madison, WI

Boring No. 2
 Surface Elevation (ft) 999±
 Job No. C17051-20
 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)		q _u (tsf)	W	LL	PL	LI
					10 in. TOPSOIL					
1	18	M	6	5	Stiff to Very Stiff, Gray/Brown (Mottled) Lean CLAY, Occasional Plant Fibers (CL) <i>USDA: 10YR 6/1 Silty clay Loam</i> <i>(Redox: F2D 7.5YR 6/6)</i>	(1.75)				
2	18	M	8	5		(2.0)	26.3			
3	18	M	6	10	Soft to Stiff, Brown to Gray (Mottled) Lean CLAY, Trace Sand and Plant Fibers (CL) <i>USDA: 10YR 6/2 Silty Clay Loam</i> <i>(Redox: C2P 7.5YR 5/8)</i>	(0.5)	32.1			
4	18	M	4	10		(0.5)	39.7			
5	18	M	4	15	Black Staining (10YR 2/1) Near 12 ft Trace Gravel Noted Near 12 ft	(1.0)				
6	18	M	4	15		(0.75)				
7	18	M	5	20		(0.5)				
8	18	M	7	20	Stiff, Varved Gray/Brown (Mottled) Lean CLAY, Occasional Plant Fibers (CL) <i>USDA: 10YR 5/1 Silty Clay Loam</i> <i>(Redox: C2F 10YR 6/6)</i>	(1.25)				
					End of Boring at 20 ft					
					Borehole Backfilled with Bentonite Chips					

WATER LEVEL OBSERVATIONS					GENERAL NOTES				
While Drilling	<input checked="" type="checkbox"/>	NW	Upon Completion of Drilling	<input type="checkbox"/>	NW	Start	8/9/17	End	8/9/17
Time After Drilling						Driller	BSD	Chief	DB
Depth to Water									Rig D-50
Depth to Cave in						Logger	MG/CD	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 Proposed Spring Harbor Pond
 Location Madison, WI

Boring No. 3
 Surface Elevation (ft) 1006±
 Job No. C17051-20
 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.	DEPTH (ft)	Rec (in.)	Moist	N		Depth (ft)	qu (qa) (tsf)	W	LL	PL
					8 in. TOPSOIL					
1		0	M	30	FILL: Medium Dense to Dense, Brown Sand with Silt, Gravel, Clay, Occasional Cobbles (Driller's Description)					
2		12	M	8	Very Stiff, Brown Lean CLAY (CL)	(2.25)	26.4			
3		14	M	6	Medium Stiff to Stiff, Brown to Gray (Mottled) Lean CLAY, Occasional Plant Fibers (CL)	(1.0)	28.6			
4		14	M	5		(0.9)	40.6			
5		14	M/W	3	Very Soft to Medium Stiff, Gray to Brown Lean CLAY, Trace Sand (CL)	(0.2)				
6		18	M/W	3		(0.5)				
					End of Boring at 15 ft					
					Borehole Backfilled with Bentonite Chips					

WATER LEVEL OBSERVATIONS

While Drilling NW Upon Completion of Drilling _____
 Time After Drilling _____ 15 min.
 Depth to Water _____ NW ▼
 Depth to Cave in _____

GENERAL NOTES

Start 8/9/17 End 8/9/17
 Driller BSD Chief DB Rig D-50
 Logger MG/CD 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 Proposed Spring Harbor Pond
 Location Madison, WI

Boring No. 4
 Surface Elevation (ft) 1000±
 Job No. C17051-20
 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
					11 in. TOPSOIL					
1	14	M/W	5		Soft to Medium Stiff, Dark Brown/Gray (Mottled) Lean CLAY (CL - Possible Fill) <i>USDA: 10YR 3/2 Silty Clay Loam</i> <i>(Redox: C2F 10YR 4/2)</i>	(0.5-0.75)	33.5			
2	14	M	6		Stiff to Soft, Brown to Gray (Mottled) Lean CLAY, Occasional Plant Fibers (CL) <i>USDA: 10YR 5/4 Silty Clay Loam</i> <i>(Redox: C2D 10YR 6/2)</i>	(1.5)	30.2			
3	18	M	5			(0.5)	34.5			
4	18	M/W	3			(0.75)	40.5			
5	18	M/W	3		Grades to Gray/Brown (Mottled) <i>USDA: 10YR 6/2</i> <i>(Redox: C2P 7.5YR 4/6)</i> Near 10 ft	(0.75)				
6	18	M/W	8		Medium Stiff to Stiff, Brown to Gray Silty Clay, Trace Sand, Occasional Sand Partings (CL-ML) <i>USDA: 7.5YR 6/4 Silty Clay Loam</i>	(1.0)				
7	16	W	32		Dense, Brown Fine to Medium SAND, Some Silt and Gravel, Scattered Cobbles/Boulders (SM) <i>USDA: 10YR 5/3 Gravelly Sandy Loam.</i>					
8	14	M/W	25		Very Stiff, Varved Gray to Brown and Rust-Brown Lean and Silty CLAY, Trace Sand (CL/CL-ML) <i>USDA: 10YR 6/2 Silty Clay Loam</i> <i>(Redox: C2P 7.5YR 4/6)</i>	(3.5)				
					End of Boring at 20 ft					
					Borehole Backfilled with Bentonite Chips					

WATER LEVEL OBSERVATIONS	GENERAL NOTES
While Drilling ∇ <u>13.5'</u> Upon Completion of Drilling _____ Time After Drilling _____ <u>15 min.</u> Depth to Water _____ <u>12.5'</u> ∇ Depth to Cave in _____	Start <u>8/9/17</u> End <u>8/9/17</u> Driller <u>BSD</u> Chief <u>DB</u> Rig <u>D-50</u> Logger <u>MG/CD</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 Proposed Spring Harbor Pond
 Location Madison, WI

Boring No. 5
 Surface Elevation (ft) 1002±
 Job No. C17051-20
 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
				0	10 in. TOPSOIL					
1	12	M	9	9	Very Stiff, Brown Lean CLAY (CL)	(2.5)	24.9			
2	12	M	10	10	Stiff, Gray to Brown Lean CLAY, Trace Sand (CL)	(1.5)	27.7			
3	14	M	6	6		(1.25)	29.8			
4	14	W	2	2	Becoming Very Soft Near 8 ft	(<0.2)	36.9			
10					End of Boring at 10 ft					
15					Borehole Backfilled with Bentonite Chips					
20										
25										

WATER LEVEL OBSERVATIONS

While Drilling ∇ 8.0' Upon Completion of Drilling _____
 Time After Drilling _____ 15 min.
 Depth to Water _____ 7.9' ∇
 Depth to Cave in _____

GENERAL NOTES

Start 8/9/17 End 8/9/17
 Driller BSD Chief DB Rig D-50
 Logger MG/CD 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 Proposed Spring Harbor Pond
 Location Madison, WI

Boring No. 6
 Surface Elevation (ft) 1003±
 Job No. C17051-20
 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.	Depth (ft)	Rec (in.)	Moist	N		qu (qa) (tsf)	w	LL	PL	LI
					10 in. TOPSOIL					
1	12	M	9		Very Stiff to Stiff, Brown to Gray (Mottled) Lean CLAY, Occasional Plant Fibers (CL) USDA: 10YR 5/4 Silty Clay Loam (Redox: C1D 10YR 6/1)	(2.5)	27.8			
2	14	M	7			(1.25)	29.1			
3	14	M	8		Stiff to Very Stiff, Gray to Brown (Mottled) Lean CLAY, Trace Sand (CL) USDA: 10YR 6/2 Silty Clay Loam (Redox: C2D 10YR 6/6, C2P 7.5YR 4/6)	(2.0)	26.0			
4	16	M/W	3		Becoming Medium Stiff to Very Soft Near 9 ft	(<0.2-0.6)	30.4			
5	14	W	5		Very Soft Near 11 ft	(<0.2)				
6	14	W	16		Medium Stiff to Stiff, Varved Gray to Brown and Rust-Brown Lean and Silty CLAY, Trace Sand, Occasional Sand Partings (CL/CL-ML) USDA: 10YR 6/2 Silty Clay Loam (Redox: C2D, F1F 10YR 5/6)	(1.0)				
7	16	M/W	16			(1.5)				
8	12	W	18			(1.5)				
					End of Boring at 20 ft					
					Borehole Backfilled with Bentonite Chips					

WATER LEVEL OBSERVATIONS

While Drilling ∇ 11.5' Upon Completion of Drilling _____
 Time After Drilling _____ 15 min.
 Depth to Water _____ 11' ∇
 Depth to Cave in _____

GENERAL NOTES

Start 8/9/17 End 8/9/17
 Driller BSD Chief DB Rig D-50
 Logger MG/CD 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
General Notes

DESCRIPTIVE SOIL CLASSIFICATION

Grain Size Terminology

Soil Fraction	Particle Size	U.S. Standard Sieve Size
Boulders.....	Larger than 12"	Larger than 12"
Cobbles.....	3" to 12"	3" to 12"
Gravel: Coarse.....	¾" to 3"	¾" to 3"
Fine.....	4.76 mm to ¾"	#4 to ¾"
Sand: Coarse.....	2.00 mm to 4.76 mm.....	#10 to #4
Medium.....	0.42 to mm to 2.00 mm.....	#40 to #10
Fine.....	0.074 mm to 0.42 mm	#200 to #40
Silt.....	0.005 mm to 0.074 mm	Smaller than #200
Clay.....	Smaller than 0.005 mm	Smaller than #200

Plasticity characteristics differentiate between silt and clay.

General Terminology

- Physical Characteristics
- Color, moisture, grain shape, fineness, etc.
- Major Constituents
- Clay, silt, sand, gravel
- Structure
- Laminated, varved, fibrous, stratified, cemented, fissured, etc.
- Geologic Origin
- Glacial, alluvial, eolian, residual, etc.

Relative Density

Term	"N" Value
Very Loose.....	0 - 4
Loose.....	4 - 10
Medium Dense.....	10 - 30
Dense.....	30 - 50
Very Dense.....	Over 50

Relative Proportions Of Cohesionless Soils

Proportional Term	Defining Range by Percentage of Weight
Trace.....	0% - 5%
Little	5% - 12%
Some	12% - 35%
And.....	35% - 50%

Consistency

Term	q _u -tons/sq. ft
Very Soft.....	0.0 to 0.25
Soft.....	0.25 to 0.50
Medium.....	0.50 to 1.0
Stiff.....	1.0 to 2.0
Very Stiff.....	2.0 to 4.0
Hard.....	Over 4.0

Organic Content by Combustion Method

Soil Description	Loss on Ignition
Non Organic.....	Less than 4%
Organic Silt/Clay.....	4 - 12%
Sedimentary Peat.....	12% - 50%
Fibrous and Woody Peat...	More than 50%

Plasticity

Term	Plastic Index
None to Slight.....	0 - 4
Slight.....	5 - 7
Medium.....	8 - 22
High to Very High ..	Over 22

The penetration resistance, N, is the summation of the number of blows required to effect two successive 6" penetrations of the 2" split-barrel sampler. The sampler is driven with a 140 lb. weight falling 30" and is seated to a depth of 6" before commencing the standard penetration test.

SYMBOLS

Drilling and Sampling

- CS – Continuous Sampling
- RC – Rock Coring: Size AW, BW, NW, 2"W
- RQD – Rock Quality Designation
- RB – Rock Bit/Roller Bit
- FT – Fish Tail
- DC – Drove Casing
- C – Casing: Size 2 ½", NW, 4", HW
- CW – Clear Water
- DM – Drilling Mud
- HSA – Hollow Stem Auger
- FA – Flight Auger
- HA – Hand Auger
- COA – Clean-Out Auger
- SS – 2" Dia. Split-Barrel Sample
- 2ST – 2" Dia. Thin-Walled Tube Sample
- 3ST – 3" Dia. Thin-Walled Tube Sample
- PT – 3" Dia. Piston Tube Sample
- AS – Auger Sample
- WS – Wash Sample
- PTS – Peat Sample
- PS – Pitcher Sample
- NR – No Recovery
- S – Sounding
- PMT – Borehole Pressuremeter Test
- VS – Vane Shear Test
- WPT – Water Pressure Test

Laboratory Tests

- q_a – Penetrometer Reading, tons/sq ft
- q_u – Unconfined Strength, tons/sq ft
- W – Moisture Content, %
- LL – Liquid Limit, %
- PL – Plastic Limit, %
- SL – Shrinkage Limit, %
- LI – Loss on Ignition
- D – Dry Unit Weight, lbs/cu ft
- pH – Measure of Soil Alkalinity or Acidity
- FS – Free Swell, %

Water Level Measurement

- ▽ - Water Level at Time Shown
- NW – No Water Encountered
- WD – While Drilling
- BCR – Before Casing Removal
- ACR – After Casing Removal
- CW – Cave and Wet
- CM – Caved and Moist

Note: Water level measurements shown on the boring logs represent conditions at the time indicated and may not reflect static levels, especially in cohesive soils.

CGC, Inc.

Madison - Milwaukee

Unified Soil Classification System

UNIFIED SOIL CLASSIFICATION AND SYMBOL CHART

COARSE-GRAINED SOILS

(more than 50% of material is larger than No. 200 sieve size)

Clean Gravels (Less than 5% fines)



GW Well-graded gravels, gravel-sand mixtures, little or no fines

GP Poorly-graded gravels, gravel-sand mixtures, little or no fines

Gravels with fines (More than 12% fines)



GM Silty gravels, gravel-sand-silt mixtures

GC Clayey gravels, gravel-sand-clay mixtures

Clean Sands (Less than 5% fines)



SW Well-graded sands, gravelly sands, little or no fines

SP Poorly graded sands, gravelly sands, little or no fines

Sands with fines (More than 12% fines)



SM Silty sands, sand-silt mixtures

SC Clayey sands, sand-clay mixtures

FINE-GRAINED SOILS

(50% or more of material is smaller than No. 200 sieve size.)



ML Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity

CL Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays

OL Organic silts and organic silty clays of low plasticity



MH Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts

CH Inorganic clays of high plasticity, fat clays

OH Organic clays of medium to high plasticity, organic silts



PT Peat and other highly organic soils

LABORATORY CLASSIFICATION CRITERIA

GW $C_u = \frac{D_{60}}{D_{10}}$ greater than 4; $C_c = \frac{D_{30}}{D_{10} \times D_{60}}$ between 1 and 3

GP Not meeting all gradation requirements for GW

GM Atterberg limits below "A" line or P.I. less than 4

Above "A" line with P.I. between 4 and 7 are borderline cases requiring use of dual symbols

GC Atterberg limits above "A" line or P.I. greater than 7

SW $C_u = \frac{D_{60}}{D_{10}}$ greater than 4; $C_c = \frac{D_{30}}{D_{10} \times D_{60}}$ between 1 and 3

SP Not meeting all gradation requirements for GW

SM Atterberg limits below "A" line or P.I. less than 4

Limits plotting in shaded zone with P.I. between 4 and 7 are borderline cases requiring use of dual symbols

SC Atterberg limits above "A" line with P.I. greater than 7

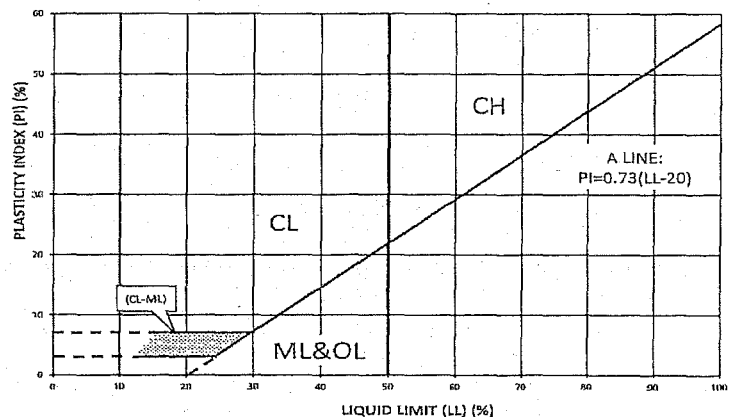
Determine percentages of sand and gravel from grain-size curve. Depending on percentage of fines (fraction smaller than No. 200 sieve size), coarse-grained soils are classified as follows:

Less than 5 percent GW, GP, SW, SP

More than 12 percent GM, GC, SM, SC

5 to 12 percent Borderline cases requiring dual symbols

PLASTICITY CHART



UNIFIED SOIL CLASSIFICATION AND SYMBOL CHART		
COARSE-GRAINED SOILS (more than 50% of material is larger than No. 200 sieve size)		
Clean Gravels (Less than 5% fines)		
GRAVELS More than 50% of coarse fraction larger than No. 4 sieve size	GW Well-graded gravels, gravel-sand mixtures, little or no fines	
	GP Poorly-graded gravels, gravel-sand mixtures, little or no fines	
	Gravels with fines (More than 12% fines)	
	GM Silty gravels, gravel-sand-silt mixtures	
	GC Clayey gravels, gravel-sand-clay mixtures	
Clean Sands (Less than 5% fines)		
SANDS 50% or more of coarse fraction smaller than No. 4 sieve size	SW Well-graded sands, gravelly sands, little or no fines	
	SP Poorly graded sands, gravelly sands, little or no fines	
	Sands with fines (More than 12% fines)	
	SM Silty sands, sand-silt mixtures	
	SC Clayey sands, sand-clay mixtures	
FINE-GRAINED SOILS (50% or more of material is smaller than No. 200 sieve size.)		
SILTS AND CLAYS Liquid limit less than 50%	ML Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity	
	CL Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays	
	OL Organic silts and organic silty clays of low plasticity	
SILTS AND CLAYS Liquid limit 50% or greater	MH Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts	
	CH Inorganic clays of high plasticity, fat clays	
	OH Organic clays of medium to high plasticity, organic silts	
HIGHLY ORGANIC SOILS	PT Peat and other highly organic soils	

APPENDIX C

DOCUMENT QUALIFICATIONS

APPENDIX C DOCUMENT QUALIFICATIONS

I. GENERAL RECOMMENDATIONS/LIMITATIONS

CGC, Inc. should be provided the opportunity for a general review of the final design and specifications to confirm that earthwork and foundation requirements have been properly interpreted in the design and specifications. CGC should be retained to provide soil engineering services during excavation and subgrade preparation. This will allow us to observe that construction proceeds in compliance with the design concepts, specifications and recommendations, and also will allow design changes to be made in the event that subsurface conditions differ from those anticipated prior to the start of construction. CGC does not assume responsibility for compliance with the recommendations in this report unless we are retained to provide construction testing and observation services.

This report has been prepared in accordance with generally accepted soil and foundation engineering practices and no other warranties are expressed or implied. The opinions and recommendations submitted in this report are based on interpretation of the subsurface information revealed by the test borings indicated on the location plan. The report does not reflect potential variations in subsurface conditions between or beyond these borings. Therefore, variations in soil conditions can be expected between the boring locations and fluctuations of groundwater levels may occur with time. The nature and extent of the variations may not become evident until construction.

II. IMPORTANT INFORMATION ABOUT YOUR GEOTECHNICAL ENGINEERING REPORT

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes. While you cannot eliminate all such risks, you can manage them. The following information is provided to help.

Geotechnical engineers structure their services to meet the specific needs of their clients. A geotechnical engineering study conducted for a civil engineer may not fulfill the needs of a construction contractor or even another civil engineer. Because each geotechnical engineering study is unique, each geotechnical engineering report is unique, prepared *solely* for the client. *No one except you* should rely on your geotechnical engineering report without first conferring with the geotechnical engineer who prepared it. *And no one - not even you* - should apply the report for any purpose or project except the one originally contemplated.

READ THE FULL REPORT

Serious problems have occurred because those relying on a geotechnical engineering report did not read it all. Do not rely on an executive summary. Do not read selected elements only.

A GEOTECHNICAL ENGINEERING REPORT IS BASED ON A UNIQUE SET OF PROJECT-SPECIFIC FACTORS

Geotechnical engineers consider a number of unique, project-specific factors when establishing the scope of a study. Typical factors include: the client's goals, objectives, and risk management preferences; the general nature of the structure involved, its size, and configuration; the location of the structure on the site; and other planned or existing site improvements, such as access roads, parking lots, and underground utilities. Unless the geotechnical engineer who conducted the study specifically indicates otherwise, *do not rely on a geotechnical engineering report* that was:

- not prepared for you,
- not prepared for your project,
- not prepared for the specific site explored, or
- completed before important project changes were made.

Typical changes that can erode the reliability of an existing geotechnical report include those that affect:

- the function of the proposed structure, as when it's changed from a parking garage to an office building, or from a light industrial plant to a refrigerated warehouse,
- elevation, configuration, location, orientation, or weight of the proposed structure,
- composition of the design team, or project ownership.

As a general rule, *always* inform your geotechnical engineer of project changes - even minor ones - and request an assessment of their impact. *CGC cannot accept responsibility or liability for problems that occur because our reports do not consider developments of which we were not informed.*

SUBSURFACE CONDITIONS CAN CHANGE

A geotechnical engineering report is based on conditions that existed at the time the geotechnical engineer performed the study. *Do not rely on a geotechnical engineering report* whose adequacy may have been affected by: the passage of time; by man-made events, such as construction on or adjacent to the site; or by natural events, such as floods, earthquakes, or groundwater fluctuations. *Always* contact the geotechnical engineer before applying the report to determine if it is still reliable. A minor amount of additional testing or analysis could prevent major problems.

MOST GEOTECHNICAL FINDINGS ARE PROFESSIONAL OPINION

Site exploration identifies subsurface conditions only at those points where subsurface tests are conducted or samples are taken. Geotechnical engineers review field and laboratory data and then apply their professional judgement to render an opinion about subsurface conditions throughout the site. Actual subsurface conditions may differ - sometimes significantly - from those indicated in your report. Retaining the geotechnical engineer who developed your report to provide construction observation is the most

effective method of managing the risks associated with unanticipated conditions.

A REPORT'S RECOMMENDATIONS ARE NOT FINAL

Do not over-rely on the confirmation-dependent recommendations included in your report. *Those confirmation-dependent recommendations are not final*, because geotechnical engineers develop them principally from judgement and opinion. Geotechnical engineers can finalize their recommendations *only* by observing actual subsurface conditions revealed during construction. *CGC cannot assume responsibility or liability for the report's confirmation-dependent recommendations if we do not perform the geotechnical-construction observation required to confirm the recommendations' applicability.*

A GEOTECHNICAL ENGINEERING REPORT IS SUBJECT TO MISINTERPRETATION

Other design team members' misinterpretation of geotechnical engineering reports has resulted in costly problems. Confront that risk by having your geotechnical engineer confer with appropriate members of the design team after submitting the report. Also retain your geotechnical engineer to review pertinent elements of the design team's plans and specifications. Constructors can also misinterpret a geotechnical engineering report. Confront that risk by having CGC participate in prebid and preconstruction conferences, and by providing geotechnical construction observation.

DO NOT REDRAW THE ENGINEER'S LOGS

Geotechnical engineers prepare final boring and testing logs based upon their interpretation of field logs and laboratory data. To prevent errors or omissions, the logs included in a geotechnical engineering report should *never* be redrawn for inclusion in architectural or other design drawings. Only photographic or electronic reproduction is acceptable, *but recognize that separating logs from the report can elevate risk.*

GIVE CONSTRUCTORS A COMPLETE REPORT AND GUIDANCE

Some owners and design professionals mistakenly believe they can make constructors liable for unanticipated subsurface conditions by limiting what they provide for bid preparation. To help prevent costly problems, give constructors the complete geotechnical engineering report, *but* preface it with a clearly written letter of transmittal. In that letter, advise constructors that the report was not prepared for purposes of bid development and that the report's accuracy is limited; encourage them to confer with the geotechnical engineer who prepared the report (a modest fee may be required) and/or to conduct additional study to obtain the specific types of information they need or prefer. A prebid conference can also be valuable. *Be sure constructors have sufficient time to perform additional study.* Only then might you be in a position to give constructors the best information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions.

READ RESPONSIBILITY PROVISIONS CLOSELY

Some clients, design professionals, and constructors do not recognize that geotechnical engineering is far less exact than other engineering disciplines. This lack of understanding has created unrealistic

expectations that have led to disappointments, claims, and disputes. To help reduce the risk of such outcomes, geotechnical engineers commonly include a variety of explanatory provisions in their reports. Sometimes labeled "limitations," many of these provisions indicate where geotechnical engineer's responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

ENVIRONMENTAL CONCERNS ARE NOT COVERED

The equipment, techniques, and personnel used to perform an *environmental* study differ significantly from those used to perform a *geotechnical* study. For that reason, a geotechnical engineering report does not usually relate any environmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated environmental problems have led to numerous project failures.* If you have not yet obtained your own environmental information, ask your geotechnical consultant for risk management guidance. *Do not rely on an environmental report prepared for someone else.*

OBTAIN PROFESSIONAL ASSISTANCE TO DEAL WITH MOLD

Diverse strategies can be applied during building design, construction, operation, and maintenance to prevent significant amounts of mold from growing on indoor surfaces. To be effective, all such strategies should be devised for the *express purpose* of mold prevention, integrated into a comprehensive plan, and executed with diligent oversight by a professional mold prevention consultant. Because just a small amount of water or moisture can lead to the development of severe mold infestations, many mold prevention strategies focus on keeping building surfaces dry. While groundwater, water infiltration, and similar issues may have been addressed as part of the geotechnical engineering study whose findings are conveyed in this report, the geotechnical engineer in charge of this project is not a mold prevention consultant; *none of the services performed in connection with the geotechnical engineer's study were designed or conducted for the purpose of mold prevention.* *Proper implementation of the recommendations conveyed in this report will not of itself be sufficient to prevent mold from growing in or on the structure involved.*

RELY ON YOUR GEOTECHNICAL ENGINEER FOR ADDITIONAL ASSISTANCE

Membership in the Geotechnical Business Council (GBC) of Geoprofessional Business Association exposes geotechnical engineers to a wide array of risk confrontation techniques that can be of genuine benefit for everyone involved with a construction project. Confer with CGC, a member of GBC, for more information.

Modified and reprinted with permission from:

Geotechnical Business Council
of the Geoprofessional Business Association
8811 Colesville Road, Suite G 106
Silver Spring, MD 20910

APPENDIX C DOCUMENT QUALIFICATIONS

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SUBSURFACE CONDITIONS CAN CHANGE

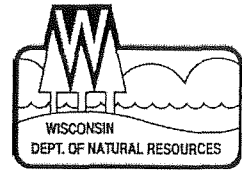
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State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
3911 Fish Hatchery Road
Fitchburg, WI 53711-5397

Scott Walker, Governor
Daniel L. Meyer, Secretary
Telephone 608-266-2621
Toll Free 1-888-936-7463
TTY Access via relay - 711



August 6, 2018

IP-SC-2018-13-01186, 01187 & 01188

City of Madison - Parks Division
Eric Knepp
210 MLK Jr. Blvd., Room 104
Madison, WI 53703

The Department of Natural Resources has completed its review of your application for a permit to place riprap, change stream course and construct a waterway with a non-navigable connection associated with an unnamed stream (WBIC 5035637), in the City of Madison, Dane County. You will be pleased to know your application is approved.

I am attaching a copy of your permit, which lists the many important conditions that must be followed to protect water quality and habitat. A copy of the permit must be posted for reference at the project site. Please read your permit conditions carefully so that you are fully aware of what is expected of you.

Please note you are required to submit photographs of the completed project within 7 days after you've finished construction. This helps both of us to document the completion of the project and compliance with the permit conditions.

Your next step will be to notify me of the date on which you plan to start construction and again after your project is complete.

If you have any questions about your permit, please call me at (608) 275-3481 or email wendy.peich@wisconsin.gov.

Sincerely,

Wendy Peich
Water Management Specialist

cc: Kerrie Hauser, Project Manager, (651) 290-5903, U.S. Army Corps of Engineers

The City of Madison is hereby granted under Section 30.19(4), Wisconsin Statutes, a permit for waterway alterations associated with an unnamed stream (WBIC 5035637), in the City of Madison, Dane County, also described as being in the SW1/4 of the SE1/4 of Section 24, Township 07 North, Range 08 East, subject to the following conditions:

PERMIT

1. You must notify Wendy Peich at phone (608) 275-3481 or email wendy.peich@wisconsin.gov before starting construction and again not more than 5 days after the project is complete.
2. You must complete the project as described on or before 08/06/2021. If you will not complete the project by this date, you must submit a written request for an extension prior to expiration of the initial time limit specified in the permit. Your request must identify the requested extension date. The Department shall extend the time limit for an individual permit or contract for no longer than an additional 5 years if you request the extension before the initial time limit expires. You may not begin or continue construction after the original permit expiration date unless the Department extends the permit in writing or grants a new permit.
3. This permit does not authorize any work other than what you specifically describe in your application and plans, and as modified by the conditions of this permit. If you wish to alter the project or permit conditions, you must first obtain written approval of the Department.
4. Before you start your project, you must first obtain any permit or approval that may be required for your project by local zoning ordinances and by the U.S. Army Corps of Engineers. You are responsible for contacting these local and federal authorities to determine if they require permits or approvals for your project. These local and federal authorities are responsible for determining if your project complies with their requirements.
5. Upon reasonable notice, you shall allow access to your project site during reasonable hours to any Department employee who is investigating the project's construction, operation, maintenance or permit compliance.
6. The Department may modify or revoke this permit for good cause, including if the project is not completed according to the terms of the permit or if the Department determines the activity is detrimental to the public interest.
7. You must post a copy of this permit at a conspicuous location on the project site, visible from the waterway, for at least five days prior to construction, and remaining at least five days after construction. You must also have a copy of the permit and approved plan available at the project site at all times until the project is complete.

8. Your acceptance of this permit and efforts to begin work on this project signify that you have read, understood and agreed to follow all conditions of this permit.
9. You must submit a series of photographs to the Department, within one week of completing work on the site. The photographs must be taken from different vantage points and depict all work authorized by this permit.
10. You, your agent, and any involved contractors or consultants may be considered a party to the violation pursuant to Section 30.292, Wis. Stats., for any violations of Chapter 30, Wisconsin Statutes, or this permit.
11. Construction shall be accomplished in such a manner as to minimize erosion and siltation into surface waters. Erosion control measures (such as silt fence and straw bales) must meet or exceed the technical standards of ch. NR 151, Wis. Adm. Code. The technical standards are found at: http://dnr.wi.gov/topic/stormwater/standards/const_standards.html.
12. All equipment used for the project including but not limited to tracked vehicles, barges, boats, hoses, sheet pile and pumps shall be de-contaminated for invasive and exotic viruses and species prior to use and after use.

The following steps must be taken every time you move your equipment to avoid transporting invasive and exotic viruses and species. To the extent practicable, equipment and gear used on infested waters shall not be used on other non-infested waters.

1. **Inspect and remove** aquatic plants, animals, and mud from your equipment.
2. **Drain all water** from your equipment that comes in contact with infested waters, including but not limited to tracked vehicles, barges, boats, hoses, sheet pile and pumps.
3. **Dispose** of aquatic plants, animals in the trash. Never release or transfer aquatic plants, animals or water from one waterbody to another.
4. **Wash your equipment** with hot (>140° F) and/or high pressure water,

- OR -

Allow your equipment to **dry thoroughly for 5 days.**

FINDINGS OF FACT

1. The City of Madison has filed an application for permits for waterway alterations associated with an unnamed stream (WBIC 5035637), in the City of Madison, Dane County, also described as being in the SW1/4 of the SE1/4 of Section 24, Township 07 North, Range 08 East.

2. The Spring Harbor at Masthead – Nautilus Drive Section project will convert two existing dry-detention basins to an individual wet-detention basin and an iron-enhanced sand filter. The reconstructed stormwater treatment features will occupy roughly the same footprint as the original stormwater treatment structures. In addition to the basin modifications, the project will stabilize approximately 1000 linear feet of channel. The original basins were constructed by building berms across the existing channel. The proposed project will remove those berms, and reconstruct or realign short sections of the channel that were historically filled. The project will also remove ash trees and nuisance species from the greenway.
3. The Department has completed an investigation of the project site and has evaluated the project as described in the application and plans.
4. near unnamed stream (WBIC 5035637) is a navigable water (and no bulkhead exists at the project site.)
5. The proposed project, if constructed in accordance with this permit will not adversely affect water quality, will not increase water pollution in surface waters and will not cause environmental pollution as defined in s. 283.01(6m), Wis. Stats.
6. The proposed project will not impact wetlands if constructed in accordance with this permit.
7. The Department of Natural Resources has determined that the agency's review of the proposed project constitutes an equivalent analysis action under s. NR 150.20(2), Wis. Adm. Code. The Department has considered the impacts on the human environment, alternatives to the proposed projects and has provided opportunities for public disclosure and comment. The Department has completed all procedural requirements of s. 1.11(2)(c), Wis. Stats., and NR 150, Wis. Adm. Code for this project.
8. The Department of Natural Resources and the applicant have completed all procedural requirements and the project as permitted will comply with all applicable requirements of Sections 30.12, 30.19(4) and 30.195 Wisconsin Statutes and Chapters NR 102, 103, 328 and 343 of the Wisconsin Administrative Code.
9. The structure or deposit will not materially obstruct navigation, will not be detrimental to the public interest and will not materially reduce the flood flow capacity of a stream.
10. The activity will not cause environmental pollution as defined in s. 299.01(4).
11. The proposal complies with all of the laws relating to platting of land and sanitation.
12. No material injury will result to the riparian rights of any riparian owners of real property that abuts any water body that is affected by the activity.

CONCLUSIONS OF LAW

1. The Department has authority under the above indicated Statutes and Administrative Codes, to issue a permit for the construction and maintenance of this project.

NOTICE OF APPEAL RIGHTS

If you believe that you have a right to challenge this decision, you should know that the Wisconsin statutes and administrative rules establish time periods within which requests to review Department decisions shall be filed. For judicial review of a decision pursuant to sections 227.52 and 227.53, Wis. Stats., you have 30 days after the decision is mailed, or otherwise served by the Department, to file your petition with the appropriate circuit court and serve the petition on the Department. Such a petition for judicial review shall name the Department of Natural Resources as the respondent.

To request a contested case hearing of any individual permit decision pursuant to section 30.209, Wis. Stats., you have 30 days after the decision is mailed, or otherwise served by the Department, to serve a petition for hearing on the Secretary of the Department of Natural Resources, P.O. Box 7921, Madison, WI, 53707-7921. The petition shall be in writing, shall be dated and signed by the petitioner, and shall include as an attachment a copy of the decision for which administrative review is sought. If you are not the applicant, you must simultaneously provide a copy of the petition to the applicant. If you wish to request a stay of the project, you must provide information, as outlined below, to show that a stay is necessary to prevent significant adverse impacts or irreversible harm to the environment. If you are not the permit applicant, you must provide a copy of the petition to the permit applicant at the same time that you serve the petition on the Department.

The filing of a request for a contested case hearing is not a prerequisite for judicial review and does not extend the 30 day period for filing a petition for judicial review.

A request for contested case hearing must meet the requirements of section 30.209, Wis. Stats., and sections NR 2.03, 2.05, and 310.18, Wis. Admin. Code, and if the petitioner is not the applicant the petition must include the following information:

- A description of the objection that is sufficiently specific to allow the department to determine which provisions of this section may be violated if the proposed permit or contract is allowed to proceed.
- A description of the facts supporting the petition that is sufficiently specific to determine how the petitioner believes the project, as proposed, may result in a violation of Chapter 30, Wis. Stats.;
- A commitment by the petitioner to appear at the administrative hearing and present information supporting the petitioner's objection.

If the petition contains a request for a stay of the project, the petition must also include information showing that a stay is necessary to prevent significant adverse impacts or irreversible harm to the environment.

Dated at South Central Region Headquarters, Wisconsin on 08/06/2018.

STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES
For the Secretary

By Wendy Peich

Wendy Peich
Water Management Specialist



DEPARTMENT OF THE ARMY
ST. PAUL DISTRICT, CORPS OF ENGINEERS
180 FIFTH STREET EAST, SUITE 700
ST. PAUL, MN 55101-1678

OCT 01 2018

REPLY TO ATTENTION OF
REGULATORY BRANCH

Regulatory File No. 2018-01056-KJH

Sally Swenson
City of Madison
210 MLK Jr. Blvd., Room 115
Madison, Wisconsin 53703

Dear Ms. Swenson:

This correspondence is in regard to your pre-construction notification (PCN) by the City of Madison requesting Department of the Army (DA) verification to for the discharge of dredged and fill material associated with the reconfiguration of existing storm water management facilities (Spring Harbor at Masthead). (WDNR Number: IP-SC-2018-13-01186 through 01188) The discharge of dredged and fill material would occur within 0.171 acre of wetland (conversion to stream) and 0.102 acre of stream (stream to streambank) for the realignment and restoration of 370 linear feet of an unnamed tributary. The project also includes the discharge of dredged and fill material associated with grading/shaping in 0.135 acre of wetland and the permanent loss of 0.004 acre of wetland. The project site is in Section 24, Township 7 North, Range 8 East, Dane County, Wisconsin.

Certain minor activities are eligible for authorization by general permits, which include Nationwide (NWP) permits. Your project as shown on the enclosed figures labeled 2018-01056-KJH Page 1 of 3 through Page 3 of 3 is authorized by NWP 43, Stormwater Management Facilities. However, this authorization is not valid until a Section 401 water quality certification or waiver is received from the Wisconsin Department of Natural Resources (WDNR).

You may not proceed with the work authorized by this NWP until you have obtained an individual 401 water quality certification or waiver from the WDNR, who has been copied on this letter. In order for this verification to be valid, you must ensure the work is performed in accordance with the enclosed general permit terms, General Conditions, St. Paul District Regional Conditions, and the Wisconsin Department of Natural Resources' 401 Water Quality Certification Conditions.

You are also required to complete and return the enclosed Compliance Certification form within 30 days upon completion of your project in accordance with your permit conditions. Please mail the completed form to the Corps contact identified in the last paragraph.

This verification is valid until March 18, 2022, unless the general permit is modified, suspended, or revoked. If the work has not been completed by that time, you should contact this office to verify that the permit is still valid. Furthermore, if you commence or are under contract to commence this activity before the date of general permit expiration, modification, or revocation, you will have 12 months from the date of expiration, modification or revocation to complete the activity under the present terms and conditions of the general permit.

Our verification of this permit is based on the project description and construction methods provided in your PCN. You are cautioned that a change in the location or plans may invalidate this verification. Proposed changes should be coordinated with this office prior to construction. Failure to comply with all terms and conditions of this permit verification invalidates this

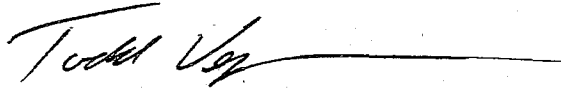
Regulatory Branch (File No. 2018-01056-KJH)

verification and could result in a violation of Section 301 of the Clean Water Act or Section 10 of the Rivers and Harbors Act. You must also obtain all local, State, and other Federal permits that apply to this project.

No jurisdictional determination was requested or prepared for this project. While not required, you may request a jurisdictional determination from the Corps contact indicated below.

If you have any questions, please contact Kerrie J. Hauser at (651) 290-5903, Kerrie.j.hauser@usace.army.mil or by mail at U.S. Army Corps of Engineers, La Crescent Field Office, 1114 South Oak Street, La Crescent, MN 55947. Correspondence and inquiries should reference the Regulatory file number shown above.

Sincerely,

A handwritten signature in black ink, appearing to read "Todd Vesperman", followed by a long horizontal line extending to the right.

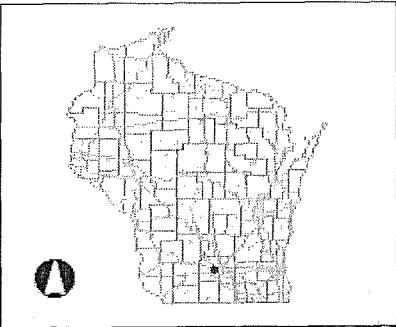
Todd M. Vesperman
Chief Southeast Section

Enclosures

cc: WDNR, Wendy Peich Water Management Specialist



Surface Water Data Viewer Map

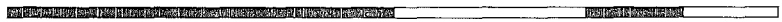


Legend

- Dams**
 - Dams with FERC License
 - Dams
- Flood Hazard Boundaries**
 - Other Boundaries
 - Limit Lines
 - SFHA / Flood Zone Boundary
- Flood Hazard Zones**
 - 1% Annual Chance Flood Hazard
 - Regulatory Floodway
 - Special Floodway
 - Area of Undetermined Flood Hazard
 - 0.2% Annual Chance Flood Hazard
 - Future Conditions 1% Annual Chance Flood Hazard
 - Area with Reduced Risk Due to Levee
- PNW-ASNRI Sensitive Areas of Lakes
- PNW-ASNRI Wild and Scenic Rivers
- PNW-ASNRI Outstanding and Exceptional Streams
- PNW-ASNRI Trout Streams
- PNW-ASNRI Wild Rice Streams
- PNW-ASNRI Outstanding and Exceptional Lakes
- PNW-ASNRI Special Area Management Plan Streams
- PNW-ASNRI Special Wetlands Inventory Study Streams
- PNW-ASNRI Coastal Wisconsin Wetlands Streams
- PNW-ASNRI Special Area

Notes

0.1 0 0.06 0.1 Miles



NAD_1983_HARN_Wisconsin_TM

1: 3,960

DISCLAIMER: The information shown on these maps has been obtained from various sources, and are of varying age, reliability and resolution. These maps are not intended to be used for navigation, nor are these maps an authoritative source of information about legal land ownership or public access. No warranty, expressed or implied, is made regarding accuracy, applicability for a particular use, completeness, or legality of the information depicted on this map. For more information, see the DNR Legal Notices web page: <http://dnr.wi.gov/legal/>

43. Stormwater Management Facilities. Discharges of dredged or fill material into non-tidal waters of the United States for the construction of stormwater management facilities, including stormwater detention basins and retention basins and other stormwater management facilities; the construction of water control structures, outfall structures and emergency spillways; the construction of low impact development integrated management features such as bioretention facilities (e.g., rain gardens), vegetated filter strips, grassed swales, and infiltration trenches; and the construction of pollutant reduction green infrastructure features designed to reduce inputs of sediments, nutrients, and other pollutants into waters to meet reduction targets established under Total Daily Maximum Loads set under the Clean Water Act.

This NWP authorizes, to the extent that a section 404 permit is required, discharges of dredged or fill material into non-tidal waters of the United States for the maintenance of stormwater management facilities, low impact development integrated management features, and pollutant reduction green infrastructure features. The maintenance of stormwater management facilities, low impact development integrated management features, and pollutant reduction green infrastructure features that are not waters of the United States does not require a section 404 permit.

The discharge must not cause the loss of greater than 1/2-acre of non-tidal waters of the United States. The discharge must not cause the loss of more than 300 linear feet of stream bed, unless for intermittent and ephemeral stream beds the district engineer waives the 300 linear foot limit by making a written determination concluding that the discharge will result in no more than minimal adverse environmental effects. This NWP does not authorize discharges into non-tidal wetlands adjacent to tidal waters. The loss of stream bed plus any other losses of jurisdictional wetlands and waters caused by the NWP activity cannot exceed 1/2-acre. This NWP does not authorize discharges of dredged or fill material for the construction of new stormwater management facilities in perennial streams.

Notification: For discharges into non-tidal waters of the United States for the construction of new stormwater management facilities or pollutant reduction green infrastructure features, or the expansion of existing stormwater management facilities or pollutant reduction green infrastructure features, the permittee must submit a preconstruction notification to the district engineer prior to commencing the activity. (See general condition 32.) Maintenance activities do not require preconstruction notification if they are limited to restoring the original design capacities of the stormwater management facility or pollutant reduction green infrastructure feature. (Authority: Section 404)

2017 Nationwide Permits St. Paul District Regional and General Conditions

To qualify for NWP authorization, the prospective permittee must comply with the following regional and general conditions, as applicable, in addition to any regional or case specific conditions imposed by the division engineer or district engineer. Prospective permittees should also contact the appropriate Corps district office to determine the status of Clean Water Act Section 401 water quality certification and/or Coastal Zone Management Act consistency for an NWP. Every person who may wish to obtain permit authorization under one or more NWPs, or who is currently relying on an existing or prior permit authorization under one or more NWPs, has been and is on notice that all of the provisions of 33 CFR 330.1 through 330.6 apply to every NWP authorization. Note especially 33 CFR 330.5 relating to the modification, suspension, or revocation of any NWP authorization.

The following Regional Conditions are applicable to all NWPs:

Nationwide Permit (NWP) Limitations:

- A. **Discretionary authority:** As allowed under 33 CFR 330.1(d), the District retains discretionary authority to require an individual permit of any activity eligible for authorization by a NWP based on concern for the aquatic environment or for any other factor of the public interest.
- B. **Limit on Tributary Impacts:** Any regulated activity that would result in the loss of greater than 500 linear feet of a tributary in a single location is not authorized by a NWP with the exception of projects verified by NWPs 13, 27, 32, 37, 53 or 54 where the permanent alteration would have an overall beneficial effect on the aquatic ecosystem associated with discharges proposed. A waiver from the specifications in this Regional Condition may be requested in writing. The waiver will only be issued if it can be demonstrated that permanent alteration of the tributary would have an overall beneficial effect on the aquatic ecosystem associated with the discharges proposed. This regional condition does not expand the limitations of a specific NWP where that NWP is more restrictive.
- C. **Linear Projects:** No linear utility or linear transportation projects are eligible for authorization by NWPs. These projects will be reviewed for authorization under the St. Paul District's regional or programmatic general permits or an individual permit.
- D. **Great Lakes Compact:** No project or part of a project that would divert more than 10,000 gallons per day of surface or ground water into or out of the Great Lakes Basin is authorized by NWPs.
- E. **Tribal Rights:** As stated in General Condition 17 of the NWPs, no activity may impair tribal rights, including treaty rights, protected tribal resources or tribal lands.
- F. **Areas under a Special Area Management Plan:** Regulated activities located within an area eligible for authorization under a valid Special Area Management Plan with an associated programmatic general permit are ineligible for authorization by NWPs.
- G. **Designated Critical Resource Water:** The Lake Superior National Estuarine Research Reserve is a designated critical resource water and is subject to the NWP limitations and PCN requirements described in General Condition #22 of the NWPs.
- H. **Calcareous fens:**
WISCONSIN: No work in a calcareous fen is authorized by a NWP unless the Wisconsin Department of Natural Resources (WI DNR) has approved an individual permit for the proposed regulated activity. Project proponents must provide evidence of an approved individual permit to the District.
MINNESOTA: No work in a calcareous fen is authorized by a NWP unless the Minnesota Department of Natural Resources (MN DNR) has approved a calcareous fen management plan specific to a project that otherwise qualifies for authorization by a NWP. Project proponents must provide evidence of an approved fen management plan to the District. A list of known Minnesota calcareous fens can be found at: http://files.dnr.state.mn.us/eco/wetlands/calcareous_fen_list.pdf.

Pre-Construction Notification (PCN) Requirements for Specific Water/Places

- I. **PCNs for Special Aquatic Resources:** A project proponent must notify the District by submitting a PCN if a regulated activity would occur in any of the following aquatic resources. **Prior to beginning work in these waters, a District NWP verification letter must be received.**

PROJECTS IN WISCONSIN:

- (1) state-designated wild rice waters (<https://data.glifwc.org/manoomin.harvest.info>);
- (2) coastal plain marshes;
- (3) bog wetland plant communities;
- (4) interdunal wetlands;
- (5) Great Lakes ridge and swale complexes;

The complete Ramsar list is available at (<https://rsis.ramsar.org/>).

More information about plant community types 2-5 listed above, may be obtained from the Wisconsin Department of Natural Resources website at: <http://dnr.wi.gov/topic/EndangeredResources/Communities.asp?mode=group&Type=Wetland>.

Additional information on identifying bog and fen communities can be found at: <http://www.mvp.usace.army.mil/Missions/Regulatory.aspx>.

PROJECTS IN MINNESOTA:

- (1) wild rice waters listed in Appendix A of these conditions and identified in Minn. R. 7050.0470, subpart 1;

Additional information on identifying bog and fen communities can be found at: <http://www.mvp.usace.army.mil/Missions/Regulatory.aspx> and at the MN DNR's Native Plant Community Classification's website: <http://www.dnr.state.mn.us/npc/classification.html>.

- J. **PCNs for Bridges, Structures, and Vessels more than 50 years old:** A project proponent must notify the District by submitting a PCN if work or fill requiring District authorization would affect a bridge, structure or permanently moored or sunken vessels more than 50 years old.
- K. **PCNs for Suspected Sediment or Soil Contamination:** A project proponent must notify the District by submitting a PCN if any regulated activity would occur in areas of known or suspected sediment or soil contamination, including but not limited to Superfund sites. Superfund sites in Minnesota or Wisconsin can be located by searching the EPA's website: <https://www.epa.gov/superfund/search-superfund-sites-where-you-live>. This condition does not apply to NWP 20. Response Operations for Oil or Hazardous Substances.
- L. **PCNs for the Apostle Islands National Lakeshore and Madeline Island:** A project proponent must notify the District by submitting a PCN if the regulated activity would result in the work, fill or placement of a structure within the boundaries of the Apostle Islands National Lakeshore or Madeline Island in Wisconsin. **Prior to beginning regulated activities in these waters, a District NWP verification letter must be received.**
- M. **PCNs for Temporary Impacts:** A project proponent must notify the District by submitting a PCN if temporary impacts would remain in place for longer than 90 days between May 15 and November 15. The PCN must specify how long the temporary impact will remain and include a restoration plan showing how all temporary fills and structures will be removed and the area restored to pre-project conditions. See also Regional Condition Q.

Mitigation Requirements

- N. **Compensatory Mitigation:** Proposed projects that require a PCN must include a statement describing how permanent *and* temporary impacts to waters of the U.S. would be avoided and minimized. The PCN must also include either: (a) a statement describing how impacts to waters of the U.S. would be compensated in accordance with the Federal Mitigation Rule (33 CFR Part 332) and the current St Paul District Policies for Compensatory Mitigation or (b) a statement explaining why compensatory mitigation should not be required for the proposed impacts.

Site Protection

- O. **Site Inspection:** The permittee shall allow representatives from the District to inspect the proposed project site and the authorized activity to ensure that it is being, or has been, constructed and maintained in accordance with the NWP authorization.
- P. **Restoration for Temporary Impacts:** All temporary impacts in waters of the U.S., including wetlands, that occur as a result of the regulated activity must be fully contained with appropriate erosion control or containment methods, be restored to preconstruction contours and elevations, and revegetated with native, non-invasive vegetation. A project proponent may request, in writing, a waiver from this condition from the District. An acceptable reason for a waiver to this condition may include, but is not limited to, the District allowing natural restoration of the site when the resulting grade and existing seed bank are sufficient for the site to restore to pre-construction conditions.
- Q. **Duration of Temporary Impacts:** Temporary impacts in waters of the U.S., including wetlands, must be avoided and limited to the smallest area and the shortest duration required to accomplish the project purpose.
- PART A, ACTIVITIES WITHOUT PCN REQUIREMENTS:
Temporary impacts may not remain in place longer than 90 days between May 15 and November 15. Before those 90 days have lapsed all temporary discharges must be removed in their entirety. If the temporary impacts would remain in place for longer than 90 days between May 15 and November 15, a PCN is required and the activity is subject to the requirements and limitations described in part B of this regional condition.
- PART B, ACTIVITIES WITH PCN REQUIREMENTS:
The PCN must specify how long the temporary impact will remain and include a restoration plan showing how all temporary fills and structures will be removed and the area restored to pre-project conditions. Temporary impacts are allowed to stay in place as long as specified in the PCN unless otherwise conditioned in a Corps NWP verification. All temporary impacts must be removed in their entirety in accordance with the plan described in the PCN unless otherwise conditioned in a NWP verification provided by the District.
- R. **Culverts and Crossings:** Unless a NWP verification authorizes otherwise, replacement and installation of culverts or crossings authorized by a NWP are to follow (or be restored to) the natural alignment and profile of the tributary. The culvert(s) or bridge(s) must adequately pass bedload, sediment load, and provide site-appropriate fish and wildlife passage. Example design elements include recessing single culverts to accommodate natural bankfull width and adjusting additional culvert inverts at an elevation higher than the bankfull elevation.
- S. **Best Management Practices:** To minimize adverse effects from soil loss and/or sediment transport that may occur as a result of the authorized discharge and associated earth work, appropriate best management practices shall be maintained and remain in place until the affected area is stabilized with vegetation or ground cover.
- T. **Riprap:** For all NWPs that allow for the use of riprap material for bank stabilization, only rock shall be used and it must be of a size sufficient to prevent its movement from the authorized alignment by natural forces under normal or high flows. A project proponent may request from the District, in writing, approval to use alternative riprap materials.
- U. **Pollutant or Hazardous Waste Spills:** If a spill of any potential pollutant or hazardous waste occurs, it is the responsibility of the permittee to immediately notify the National Response Center at 1-800-424-8802 or www.nrc.uscg.mil AND
IN WISCONSIN: the Wisconsin Department of Natural Resources' Spills Team at 1-800-943-0003
IN MINNESOTA: the Minnesota State Duty Officer at 1-800-422-0798.
The permittee is responsible for removing such pollutants and hazardous materials and for minimizing any contamination resulting from a spill in accordance with state and federal laws.
- V. **Clean Construction Equipment:** All construction equipment must be clean prior to entering and before leaving the work site in order to prevent the spread of invasive species.
- W. **Compliance:** The permittee is responsible for ensuring that whoever performs, supervises or oversees any portion of the physical work associated with the construction of the project has a copy of and is familiar with all the terms and conditions of the NWP and any special conditions included in any written verification letter from the District. The permittee is ultimately responsible for ensuring that all the terms and conditions of the NWPs are complied with.

The following General Conditions are applicable to all NWPs:

1. Navigation.

(a) No activity may cause more than a minimal adverse effect on navigation.

(b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.

(c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

2. **Aquatic Life Movements.** No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species. If a bottomless culvert cannot be used, then the crossing should be designed and constructed to minimize adverse effects to aquatic life movements.

3. **Spawning Areas.** Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

4. **Migratory Bird Breeding Areas.** Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

5. **Shellfish Beds.** No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.

6. **Suitable Material.** No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see section 307 of the Clean Water Act).

7. **Water Supply Intakes.** No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

8. **Adverse Effects from Impoundments.** If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

9. **Management of Water Flows.** To the maximum extent practicable, the preconstruction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization, storm water management activities, and temporary and permanent road crossings, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or

high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

10. Fills Within 100-Year Floodplains. The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

11. Equipment. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

12. Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow, or during low tides.

13. Removal of Temporary Fills. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

14. Proper Maintenance. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.

15. Single and Complete Project. The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

16. Wild and Scenic Rivers.

(a) No NWP activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status.

(b) If a proposed NWP activity will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, the permittee must submit a pre-construction notification (see general condition 32). The district engineer will coordinate the PCN with the Federal agency with direct management responsibility for that river. The permittee shall not begin the NWP activity until notified by the district engineer that the Federal agency with direct management responsibility for that river has determined in writing that the proposed NWP activity will not adversely affect the Wild and Scenic River designation or study status.

(c) Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or Study River (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service). Information on these rivers is also available at: <http://www.rivers.gov/>.

17. Tribal Rights. No NWP activity may cause more than minimal adverse effects on tribal rights (including treaty rights), protected tribal resources, or tribal lands.

18. Endangered Species.

(a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such species. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless ESA section 7 consultation addressing the effects of the proposed activity has been completed. Direct effects are the immediate effects on listed species and critical habitat caused by the NWP activity. Indirect effects are those effects on listed species and critical habitat that are caused by the NWP activity and are later in time, but still are reasonably certain to occur.

(b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. If pre-construction notification is required for the proposed activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation has not been submitted, additional ESA section 7 consultation may be necessary for the activity and the respective federal agency would be responsible for fulfilling its obligation under section 7 of the ESA.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species or designated critical habitat, the pre-construction notification must include the name(s) of the endangered or threatened species that might be affected by the proposed activity or that utilize the designated critical habitat that might be affected by the proposed activity. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps' determination within 45 days of receipt of a complete preconstruction notification. In cases where the non-Federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the activity, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification that the proposed activity will have "no effect" on listed species or critical habitat, or until ESA section 7 consultation has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(d) As a result of formal or informal consultation with the FWS or NMFS the district engineer may add species-specific permit conditions to the NWPs.

(e) Authorization of an activity by an NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the FWS or the NMFS, the Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word "harm" in the definition of "take" means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.

(f) If the non-federal permittee has a valid ESA section 10(a)(1)(B) incidental take permit with an approved Habitat Conservation Plan for a project or a group of projects that includes the proposed NWP activity, the non-federal applicant should provide a copy of that ESA section 10(a)(1)(B) permit with the PCN required by paragraph (c) of this general condition. The district engineer will coordinate with the agency that issued the ESA section 10(a)(1)(B) permit to determine whether the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation conducted for the ESA section 10(a)(1)(B) permit. If that coordination results in concurrence from the agency that the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation for the ESA section 10(a)(1)(B) permit, the district engineer does not need to conduct a separate ESA section 7 consultation for the proposed NWP activity. The district engineer will notify the non-federal applicant within 45 days of receipt of a complete pre-construction notification whether the ESA section 10(a)(1)(B) permit covers the proposed NWP activity or whether additional ESA section 7 consultation is required.

(g) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the FWS and NMFS or their World Wide Web pages at <http://www.fws.gov/> or <http://www.fws.gov/ipac> and <http://www.nmfs.noaa.gov/pr/species/esa/> respectively.

19. Migratory Birds and Bald and Golden Eagles. The permittee is responsible for ensuring their action complies with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The permittee is responsible for contacting appropriate local office of the U.S. Fish and Wildlife Service to

determine applicable measures to reduce impacts to migratory birds or eagles, including whether "incidental take" permits are necessary and available under the Migratory Bird Treaty Act or Bald and Golden Eagle Protection Act for a particular activity.

20. Historic Properties.

- (a) In cases where the district engineer determines that the activity may have the potential to cause effects to properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.
- (b) Federal permittees should follow their own procedures for complying with the requirements of section 106 of the National Historic Preservation Act. If pre-construction notification is required for the proposed NWP activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation is not submitted, then additional consultation under section 106 may be necessary. The respective federal agency is responsible for fulfilling its obligation to comply with section 106.
- (c) Non-federal permittees must submit a pre-construction notification to the district engineer if the NWP activity might have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties might have the potential to be affected by the proposed NWP activity or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of, or potential for, the presence of historic properties can be sought from the State Historic Preservation Officer, Tribal Historic Preservation Officer, or designated tribal representative, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing the requirements of section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted in the PCN and these identification efforts, the district engineer shall determine whether the proposed NWP activity has the potential to cause effects on the historic properties. Section 106 consultation is not required when the district engineer determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR 800.3(a)). Section 106 consultation is required when the district engineer determines that the activity has the potential to cause effects on historic properties. The district engineer will conduct consultation with consulting parties identified under 36 CFR 800.2(c) when he or she makes any of the following effect determinations for the purposes of section 106 of the NHPA: no historic properties affected, no adverse effect, or adverse effect. Where the non-Federal applicant has identified historic properties on which the activity might have the potential to cause effects and so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects to historic properties or that NHPA section 106 consultation has been completed.
- (d) For non-federal permittees, the district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA section 106 consultation is required. If NHPA section 106 consultation is required, the district engineer will notify the non-Federal applicant that he or she cannot begin the activity until section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.
- (e) Prospective permittees should be aware that section 110k of the NHPA (54 U.S.C. 306113) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

21. Discovery of Previously Unknown Remains and Artifacts. If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by this permit, you must immediately notify the district engineer of what you have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal, and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

22. Designated Critical Resource Waters. Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.

- (a) Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, and 52 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.
- (b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, 38, and 54, notification is required in accordance with general condition 32, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.

23. Mitigation. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal:

- (a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).
- (b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal.
- (c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects.
- (d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation to ensure that the activity results in no more than minimal adverse environmental effects. Compensatory mitigation for losses of streams should be provided, if practicable, through stream rehabilitation, enhancement, or preservation, since streams are difficult to-replace resources (see 33 CFR 332.3(e)(3)).
- (e) Compensatory mitigation plans for NWP activities in or near streams or other open waters will normally include a requirement for the restoration or enhancement, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, the restoration or maintenance/protection of riparian areas may be the only compensatory mitigation required. Restored riparian areas should consist of native species. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns.

Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to restore or maintain/protect a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or maintaining/protecting a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of minimization or compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

(f) Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.

- (1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in no more than minimal adverse environmental effects. For the NWP, the preferred mechanism for providing compensatory mitigation is mitigation bank credits or in-lieu fee program credits (see 33 CFR 332.3(b)(2) and (3)). However, if an appropriate number and type of mitigation bank or in-lieu credits are not available at the time the PCN is submitted to the district engineer, the district engineer may approve the use of permittee-responsible mitigation.
 - (2) The amount of compensatory mitigation required by the district engineer must be sufficient to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see 33 CFR 330.1(e)(3)). (See also 33 CFR 332.3(f)).
 - (3) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, aquatic resource restoration should be the first compensatory mitigation option considered for permittee-responsible mitigation.
 - (4) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) through (14) must be approved by the district engineer before the permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)).
 - (5) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan only needs to address the baseline conditions at the impact site and the number of credits to be provided.
 - (6) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan (see 33 CFR 332.4(c)(1)(ii)).
- (g) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any NWP activity resulting in the loss of greater than 1/2-acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that an NWP activity already meeting the established acreage limits also satisfies the no more than minimal impact requirement for the NWPs.
- (h) Permittees may propose the use of mitigation banks, in-lieu fee programs, or permittee-responsible mitigation. When developing a compensatory mitigation proposal, the permittee must consider appropriate and practicable options consistent with the framework at 33 CFR 332.3(b). For activities resulting in the loss of marine or estuarine resources, permittee-responsible mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.
- (i) Where certain functions and services of waters of the United States are permanently adversely affected by a regulated activity, such as discharges of dredged or fill material into waters of the United States that will convert a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse environmental effects of the activity to the no more than minimal level.

24. Safety of Impoundment Structures. To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.

25. Water Quality. Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA section 401, individual 401 Water Quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

26. Coastal Zone Management. In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). The district engineer or a State may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

27. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its section 401 **Water Quality Certification**, or by the state in its **Coastal Zone Management Act consistency determination**.

28. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the United States authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.

29. Transfer of Nationwide Permit Verifications. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature "When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below."

(Transferee)

(Date)

30. Compliance Certification. Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and implementation of any required compensatory mitigation. The success of any required permittee-responsible

mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include:

- (a) A statement that the authorized activity was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions;
- (b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(l)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and
- (c) The signature of the permittee certifying the completion of the activity and mitigation. The completed certification document must be submitted to the district engineer within 30 days of completion of the authorized activity or the implementation of any required compensatory mitigation, whichever occurs later.

31. Activities Affecting Structures or Works Built by the United States. If an NWP activity also requires permission from the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers (USACE) federally authorized Civil Works project (a "USACE project"), the prospective permittee must submit a pre-construction notification. See paragraph (b)(10) of general condition 32. An activity that requires section 408 permission is not authorized by NWP until the appropriate Corps office issues the section 408 permission to alter, occupy, or use the USACE project, and the district engineer issues a written NWP verification.

32. Pre-Construction Notification.

(a) Timing. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a preconstruction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete. The request must specify the information needed to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:

- (1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or
- (2) 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or are in the vicinity of the activity, or to notify the Corps pursuant to general condition 20 that the activity might have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)) has been completed. Also, work cannot begin under NWPs 21, 49, or 50 until the permittee has received written approval from the Corps. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

(b) Contents of Pre-Construction Notification: The PCN must be in writing and include the following information:

- (1) Name, address and telephone numbers of the prospective permittee;
- (2) Location of the proposed activity;
- (3) Identify the specific NWP or NWP(s) the prospective permittee wants to use to authorize the proposed activity;
- (4) A description of the proposed activity; the activity's purpose; direct and indirect adverse environmental effects the activity would cause, including the anticipated amount of loss of wetlands, other special aquatic sites, and other waters expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; a description of any proposed mitigation measures intended to reduce the adverse environmental effects caused by the proposed activity; and any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings for linear projects that require Department of the Army authorization but do not require pre-construction notification. The description of the proposed activity and any proposed mitigation measures should be sufficiently detailed to allow the district engineer to determine that the adverse environmental effects of the activity will be no more than minimal and to determine the need for compensatory mitigation or other mitigation measures. For single and complete linear projects, the PCN must include the quantity of anticipated losses of wetlands, other special aquatic sites, and other waters for each single and complete crossing of those wetlands, other special aquatic sites, and other waters. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the activity and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans);
- (5) The PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many wetlands, other special aquatic sites, and other waters. Furthermore, the 45 day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate;
- (6) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied, or explaining why the adverse environmental effects are no more than minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.
- (7) For non-Federal permittees, if any listed species or designated critical habitat might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat, the PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed activity or utilize the designated critical habitat that might be affected by the proposed activity. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with the Endangered Species Act;
- (8) For non-Federal permittees, if the NWP activity might have the potential to cause effects to a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, the PCN must state which historic property might have the potential to be affected by the proposed activity or include a vicinity map indicating the location of the historic property. For NWP activities that require pre construction notification, Federal permittees must provide documentation demonstrating compliance with section 106 of the National Historic Preservation Act;

(9) For an activity that will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, the PCN must identify the Wild and Scenic River or the "study river" (see general condition 16); and

(10) For an activity that requires permission from the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers federally authorized civil works project, the pre-construction notification must include a statement confirming that the project proponent has submitted a written request for section 408 permission from the Corps office having jurisdiction over that USACE project.

(c) Form of Pre-Construction Notification: The standard individual permit application form (Form ENG 4345) may be used, but the completed application form must clearly indicate that it is an NWP PCN and must include all of the applicable information required in paragraphs (b)(1) through (10) of this general condition. A letter containing the required information may also be used. Applicants may provide electronic files of PCNs and supporting materials if the district engineer has established tools and procedures for electronic submittals.

(d) Agency Coordination:

(1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the activity's adverse environmental effects so that they are no more than minimal.

(2) Agency coordination is required for:

(i) all NWP activities that require preconstruction notification and result in the loss of greater than 1/2-acre of waters of the United States;

(ii) NWP 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52 activities that require pre-construction notification and will result in the loss of greater than 300 linear feet of stream bed;

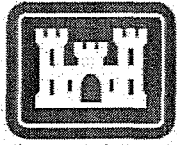
(iii) NWP 13 activities in excess of 500 linear feet, fills greater than one cubic yard per running foot, or involve discharges of dredged or fill material into special aquatic sites; and

(iv) NWP 54 activities in excess of 500 linear feet, or that extend into the waterbody more than 30 feet from the mean low water line in tidal waters or the ordinary high water mark in the Great Lakes.

(3) When agency coordination is required, the district engineer will immediately provide (e.g., via e-mail, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (FWS, state natural resource or water quality agency, EPA, and, if appropriate, the NMFS). With the district engineer via telephone, facsimile transmission, or e-mail that they intend to provide substantive, site-specific comments. The comments must explain why the agency believes the adverse environmental effects will be more than minimal. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame concerning the proposed activity's compliance with the terms and conditions of the NWPs, including the need for mitigation to ensure the net adverse environmental effects of the proposed activity are no more than minimal. The district engineer will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.

(4) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.

(5) Applicants are encouraged to provide the Corps with either electronic files or multiple copies of pre-construction notifications to expedite agency coordination.



**US Army Corps
of Engineers®**

St. Paul District

COMPLIANCE CERTIFICATION

Regulatory File Number: 2018-01056-KJH
Name of Permittee: City of Madison (Sally Swenson)
County/State: Dane County, Wisconsin
Date of Issuance: October 1, 2018

Upon completion of the activity authorized by this permit and any mitigation required by the permit, sign this certification and return it to the Corps contact identified in your verification letter within 30 days.

Please note that your permitted activity is subject to a compliance inspection by a U.S. Army Corps of Engineers representative. If you fail to comply with this permit, you are subject to permit suspension, modification, or revocation.

By signing below, the permittee is certifying that the work authorized by the above referenced permit has been completed in accordance with the terms and conditions of the permit, and any required mitigation was completed in accordance with the permit conditions.

Signature of Permittee

Date



Department of Public Works
Engineering Division
 Robert F. Phillips, P.E., City Engineer

City-County Building, Room 115
 210 Martin Luther King, Jr. Boulevard
 Madison, Wisconsin 53703
 Phone: (608) 266-4751
 Fax: (608) 264-9275
engineering@cityofmadison.com
www.cityofmadison.com/engineering

Assistant City Engineer
 Gregory T. Fries, P.E.

Principal Engineer 2
 Christopher J. Petykowski, P.E.
 John S. Fahrney, P.E.

Principal Engineer 1
 Christina M. Bachmann, P.E.
 Eric L. Dundee, P.E.

Facilities & Sustainability
 Jeanne E. Hoffman, Manager

Operations Manager
 Kathleen M. Cryan

Mapping Section Manager
 Eric T. Pederson, P.S.

Financial Manager
 Steven B. Danner-Rivers

February 4, 2019

**NOTICE OF ADDENDUM
 ADDENDUM NO. 1**

**CONTRACT NO. 8325
 PROJECT NO. 11399 SPRING HARBOR AT MASTHEAD (NAUTILUS POND)**

Revise and amend the contract document(s) for the above project as stated in this addendum, otherwise, the original document shall remain in effect.

Plan Sheets:

Remove
 Sheet D-1

Insert
 Sheet D-1 (Rev. 02-04-2019)

Specifications:

Remove
 Bid Item 20101 Excavation Cut

Bid Item 90037 Iron Enhanced Filter

Bid Item 90040 Clay Liner Provision and Placement

Insert
 Bid Item 20101 Excavation Cut (*Clay Liner Excavation and Fill quantities removed - See Revised Bid Item Below*)

Bid Item 90037 Iron Enhanced Filter (*Elemental Iron quantity changed from 105 Ton to 72 Ton - See Revised Bid Item Below*)

Proposal Page:

Action	Bid Item	Description	Original Quantity	New Quantity
MODIFY	20101	EXCAVATION CUT	9,440 C.Y.	7,416 C.Y.
REMOVE	90040	CLAY LINER PROVISION AND PLACEMENT	2,024 C.Y.	--

BID ITEM 20101: EXCAVATION CUT

DESCRIPTION

Work under this item shall include all labor, equipment, materials, and incidentals necessary to excavate to grades as represented by the contours on the plan set, as shown on the cross-sections, or as defined in these Special Provisions. The

bid item excludes the stripping of topsoil, which is paid under Bid Item 20221.

Cut and Fill quantities were calculated using the average end area method. Unless there are significant changes (>10% volume change), the plan quantity shall be the final amount for payment. No expansion or shrinkage factors have been applied to the earthwork quantities.

- Total Cut: **13,992 C.Y.**
 - Topsoil Removal 4,552 C.Y. (*Paid Under Bid Item 20221*)
 - Pond & Channel Grading: 5,667 C.Y.
 - Iron Enhanced Filter: 510 C.Y.
 - Infiltration Trench: 290 C.Y.
 - Access Roads: 949 C.Y.

- Total Fill
 - Pond/Site Grading: 2,595 C.Y.
 - Access Road Aggregate: 678 C.Y. (*Paid Under Bid Item 40102*)
 - Iron Enhance Sand Media: 506 C.Y. (*Paid Under Bid Item 90037*)
 - 3-Inch Clear – Infiltration Trench: 209 C.Y. (*Paid Under Bid Item 20217*)
 - Topsoil Placement: 2,088 C.Y. (*Paid Under Bid Item 20221*)

Where topsoil in the pond area is to be placed below the finish grades shown, the over excavation for the placement of topsoil has been included in the excavation quantity. Topsoil segregation, temporary stockpiling, and redistribution over disturbed areas, shall be paid under Bid Item 20221 – Topsoil.

Placement of on-site fill shall be included in this bid item. Excess material generated during pond construction shall be hauled off-site and disposed of by the Contractor at a site provided by the Contractor.

If there are substantial changes in the pond grading, City crews shall survey the area and the difference in Excavation Cut over/under the existing terrain shall be calculated on an in-place basis by the Project Engineer.

All on-site stockpiles shall be enclosed with a silt fence paid under Bid Items 21022, Silt Fence – Provide, Install & Maintain; and 21023, Silt Fence – Remove and Restore. No material is permitted to be stockpiled in the pond, or the wooded areas. The Contractor shall not store Excavation Cut on site, with the exception of topsoil, for periods longer than 1 day, without permission of the Project or Construction Engineer. The Contractor shall be mindful of predicted weather events and remove cut material accordingly. The entire project site serves as a floodplain, and unnecessary material shall not be stored on site.

METHOD OF MEASUREMENT

Excavation Cut within the limits shown in the plan set, or as defined in these Special Provisions, shall be paid based on the “Plan Quantity” without measurement thereof. The plan quantity was computed using the average end area method, based on cross-sections. No changes to this quantity shall be approved unless there are modifications to the plan that result in significant (>10%) increase or decrease in quantity.

BASIS OF PAYMENT

Excavation Cut shall be paid at the contract unit price for the work as described above, which shall be considered full compensation for all labor, materials, equipment, and incidentals necessary to complete this item of work.

BID ITEM 90037: IRON ENHANCED FILTER

DESCRIPTION

Work under this item includes construction of the Iron Enhanced Filter as defined in the plan set. This bid item includes the provision and placement of the iron enhanced media. Underdrain materials, geotextile filter fabric, and surface stones shall be paid under the appropriate bid items.

MATERIALS

The Iron Enhanced Filter shall be constructed with the following materials.

- Geotextile Filter Fabric Type SAS Non Woven:
 - Estimated Quantity: 1,310 S.Y. (*Paid Under Bid Item 20140*)
- 4" Corrugated, Flexible, Polyethylene pipe with pre-cut slits. Pipe with pre-drilled holes will not be permitted.
 - Estimated Quantity: 750 L.F. (*Paid Under Bid Item 90038*)
- Schedule 40 PVC Risers and appropriate connectors or junctions to construct cleanouts for the underdrain pipe.
 - Estimated Quantity: 20 L.F. (*Paid Under Bid Item 90044*)
- Pea-gravel
 - Estimated Quantity: 28 C.Y. or 56 Ton (*Paid Under Bid Item 90038*)
- ASTM C33 Sand, or Engineer Approved Equivalent:
 - Estimated Quantity: 471 C.Y. or 1036 Ton
- Elemental Iron, Sizing Equivalent to ASTM C33 Sand, elemental iron and sand will be fully integrated prior to placement.
 - Estimated Quantity: 35 C.Y. or 72 Ton
- River Cobbles
 - Estimated Quantity: 8-9 C.Y. or 14.5 Ton (*Paid Under Bid Item 90036*)
- Boulders
 - Estimated Quantity: 102 stones, or 30 Ton (*Paid Under Bid Item 90035*)

Elemental Iron shall be sourced from Connelly –GPM Inc., or from an Engineer approved equivalent.

Connelly-GPM Inc.
3154 South California Ave.
Chicago, IL 60608
Ph: (773) 247-7231

CONSTRUCTION

The Contractor shall excavate the Iron Enhanced Filter (IEF) bed to the lines and grades shown on the plan set. Filter fabric shall be placed in accordance with manufacturer's recommendations and without gaps or tears.

Filter underdrain pipes shall be placed as shown in the plan set, approximate 20-feet apart, and shall run the length of the IEF. Underdrains shall be sloped at approximately 0.5%. This can be achieved by either sloping the bed of the IEF, or by sloping pipe bedding. Cleanouts shall be placed at underdrain ends, or where multiple pipes join.

Filter underdrains shall be covered with a layer of pea-gravel that will serve as a gradation filter for the sand. Pea gravel depths shall not exceed 1-foot total, including pipe diameter.

The iron enhanced filter media shall consist of ASTM C33 sand mixed with elemental iron. The mixing rate shall be 5-8% iron by volume. The media shall be thoroughly and completely mixed. Mixing off-site is acceptable, and preferred, if it can occur in a controlled environment. If mixed on-site, the media shall be mixed via a minimum of 20 passes in each direction with a rototiller. Media shall be placed in lifts that are appropriate for thorough rototiller mixing.

The Contractor shall keep the IEF media clean and dry until placement occurs.

The Contractor shall keep the IEF off-line until all surrounding banks and contributing areas have been fully stabilized, with the exception of the trucking route for the media. If the Contractor does not maintain the material in good condition

February 4, 2019

Page 4

prior to the IEF coming on-line, the media shall be replaced at no additional cost to the City.

River Cobbles shall be placed at the pipe outfall to stabilize the sand. Boulders shall be placed to serve as a flow separator and for aesthetic purposes. Therefore, the placement of the boulders will be directed by the Engineer. Boulders shall be individually placed in an orderly manner.

Pricing, field conditions, and other factors may impact the ultimate size of the IEF. Quantities of this bid item may be altered. Alterations of this bid item quantity shall not result in a revision of the contract unit price.

METHOD OF MEASUREMENT

Iron Enhanced Filter shall be measured per Square Foot of surface area fully constructed in the field and approved by the Construction Engineer or Project Engineer.

BASIS OF PAYMENT

Iron Enhanced Filter shall be measured and paid at the contract unit price, which shall be considered full compensation for construction of the IEF, including provision and placement of the sand and elemental iron. Excavation Cut, Geotextile Filter Fabric, Filter Underdrain, River Cobbles, and Boulders shall all be paid separately, under the appropriate bid items.

Please acknowledge this addendum on page E1 of the contract documents and/or in Section E: Bidder's Acknowledgement on Bid Express.

Electronic version of these documents can be found on the Bid Express web site at:

<http://www.bidexpress.com>

If you are unable to download plan revisions associated with the addendum, please contact the Engineering office at 608-266-4751 receive the material by another route.

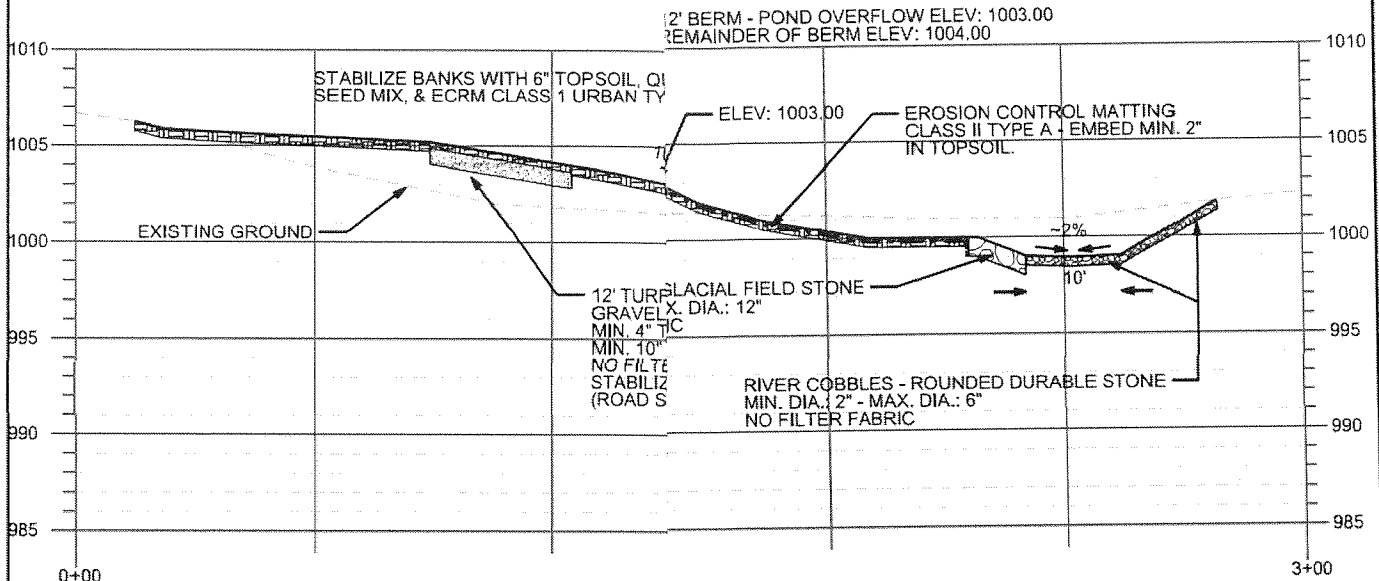
Sincerely,

A handwritten signature in black ink, appearing to read "Robert Phillips". The signature is stylized with large, flowing loops.

Robert F. Phillips, P.E., City Engineer

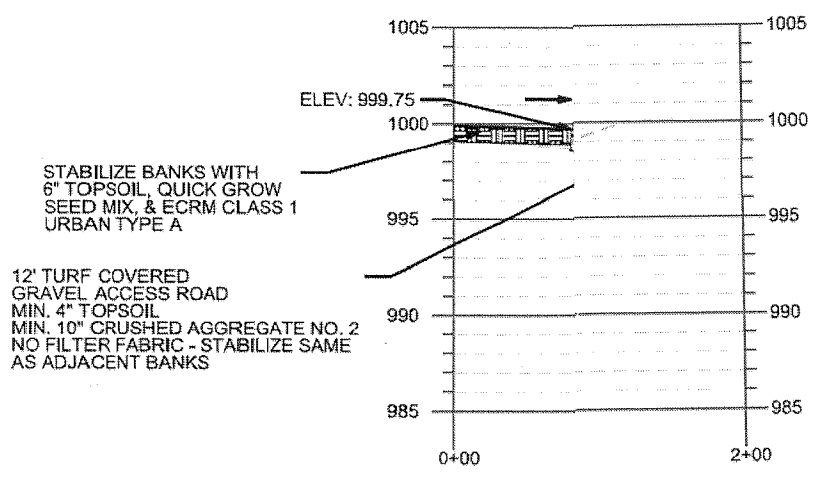
Cc: Greg Fries

APPENDUM



NOTE:
ALL STONE PLACED WITHIN THE CHANNEL
SHALL BE PLACED SUCH THAT THE TOP STONE
IS FLUSH WITH THE ADJACENT CHANNEL GRADE.
STONES SHALL NOT BE SIGNIFICANTLY ELEVATED
BEYOND THE CHANNEL.

K GROW
A



AFTER GRADING CHANNEL,
THE CONTRACTOR SHALL
COMPACT THE CHANNEL BED
WITH BUCKET TO STABILIZE BED
MATERIAL. PLACE ECRM CLASS II
TYPE C MATTING ON ALL BED
SECTIONS NOT STABILIZED W/ RIPRAP.

PLOT SCALE:

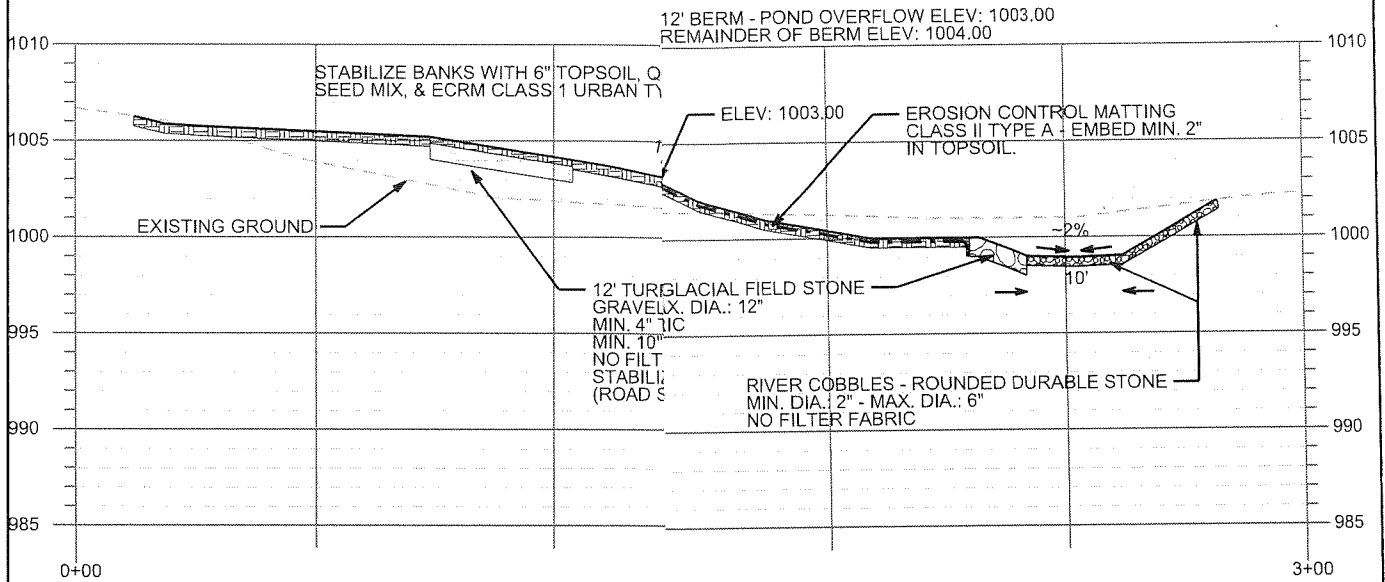
PLOT NAME:

REV. DATE:

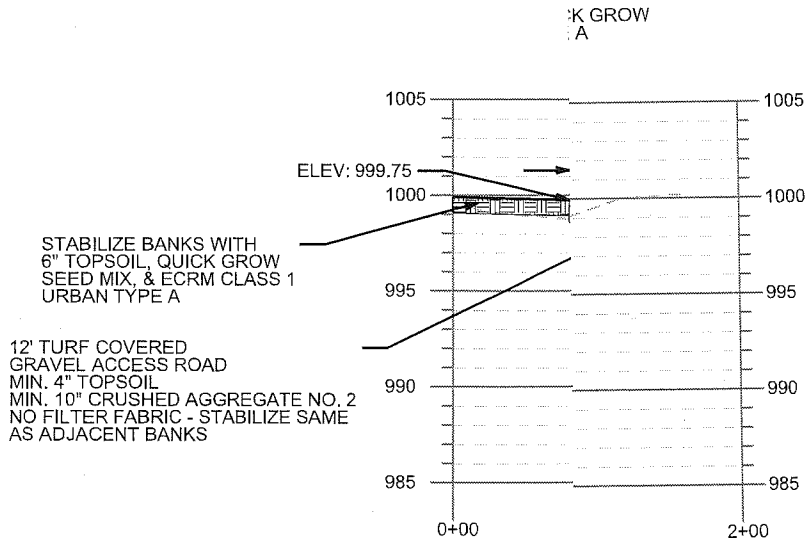
ORIGINATOR: CITY OF MADISON, STREETS DIVISION

DETAILS
POND CONSTRUCTION & IRON ENHANCED FILTER CITY OF MADISON

ORIGINAL



NOTE:
ALL STONE PLACED WITHIN THE CHANNEL SHALL BE PLACED SUCH THAT THE TOP STONE IS FLUSH WITH THE ADJACENT CHANNEL GRADE. STONES SHALL NOT BE SIGNIFICANTLY ELEVATED BEYOND THE CHANNEL.



AFTER GRADING CHANNEL, THE CONTRACTOR SHALL COMPACT THE CHANNEL BED WITH BUCKET TO STABILIZE BED MATERIAL. PLACE ECRM CLASS II TYPE C MATTING ON ALL BED SECTIONS NOT STABILIZED W/ RIPRAP.

PLOT SCALE: _____
PLOT NAME: _____

REV. DATE: _____

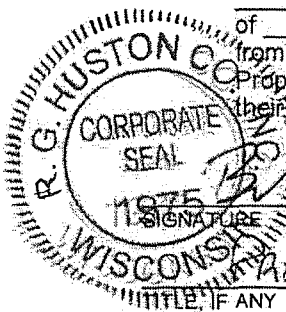
ORIGINATOR: CITY OF MADISON, STREETS DIVISION

SECTION E: BIDDERS ACKNOWLEDGEMENT

SPRING HARBOR AT MASTHEAD (NAUTILUS POND)
CONTRACT NO. 8325

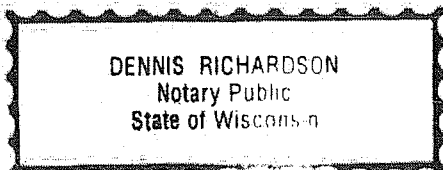
Bidder must state a Unit Price and Total Bid for each item. The Total Bid for each item must be the product of quantity, by Unit Price. The Grand Total must be the sum of the Total Bids for the various items. In case of multiplication errors or addition errors, the Grand Total with corrected multiplication 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 - 2019 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 Nos. 1 through 1 to the Contract, 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 R.G. HUSTON Co, Inc. (name of corporation, partnership, or person submitting bid) a corporation organized and existing under the laws of the State of WISCONSIN 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]
- BRAD HUSTON

TITLE, IF ANY



Sworn and subscribed to before me this 7th day of FEBRUARY, 20 19

(Notary Public or other officer authorized to administer oaths)
My Commission Expires 1-10-20

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

Contract 8325 – R. G. Huston Co., Inc.

Section F: Best Value Contracting (BVC)

This section is a required document for the bid to be considered complete. There are two methods for completing the Best Value Contracting (BVC) form. Method one: The form can be filled out online and submitted to this site to be included with your electronic bid. Method two: The form can be downloaded from the site and submitted by hand to the City of Madison.

Method of Submittal for BVC (click in box below to choose) *

I will submit Bid Express fillable online form (BVC).

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 and FROST)
- IRON WORKER
- IRON WORKER (ASSEMBLER, METAL BLDGS)
- PAINTER and DECORATOR
- PLASTERER
- PLUMBER
- RESIDENTIAL ELECTRICIAN
- ROOFER and WATER PROOFER
- SHEET METAL WORKER
- SPRINKLER FITTER
- STEAMFITTER
- STEAMFITTER (REFRIGERATION)
- STEAMFITTER (SERVICE)
- TAPER and FINISHER
- TELECOMMUNICATIONS (VOICE, DATA and VIDEO) INSTALLER-TECHNICIAN
- TILE SETTER

SPRING HARBOR AT MASTHEAD (NAUTILUS POND)
CONTRACT No. 8325

Small Business Enterprise Compliance Report

Cover Sheet

This information MUST be submitted in a separate sealed envelope marked
"ENVELOPE NO. 2 - SBE COMPLIANCE REPORT".

Prime Bidder Information:

Company: R.G. Huston Company, Inc.

Address: 2561 Coffeytown Road
Cottage Grove, WI 53527

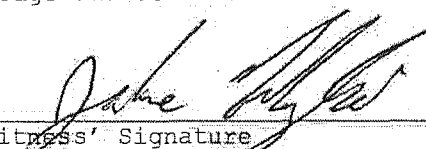
Telephone Number: (608) 255-9223

Fax Number: (608) 839-5936

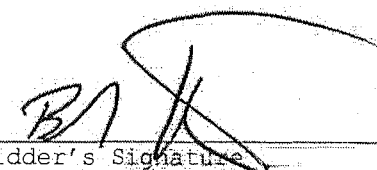
Contact Person/Title: Brad Huston, President

Prime Bidder Certification:

I, Brad Huston, President of R.G. Huston Company, Inc. certify that the information
contained in this SBE Compliance Report is true and correct to the best of my
knowledge and belief.



Witness' Signature



Bidder's Signature

2-7-19

Date



SPRING HARBOR AT MASTHEAD (NAUTILUS POND)
CONTRACT No. 8325

Small Business Enterprise Compliance Report

Summary Sheet

This information MUST be submitted in a separate sealed envelope marked
"ENVELOPE NO. 2 - SBE COMPLIANCE REPORT".

SBE SUBCONTRACTORS WHO ARE NOT SUPPLIERS

<u>Name(S) of SBEs Utilized</u>	<u>Type of Work</u>	<u>% of Total Bid Amount</u>
Bullet	Trucking	2.00%
Burse	Survey	0.08%

Subtotal SBE who are not suppliers: 2.08 %

SBE SUBCONTRACTORS WHO ARE SUPPLIERS

<u>Name(S) of SBEs Utilized</u>	<u>Type of Work</u>	<u>% of Total Bid Amount</u>
USSI	Railing	0.76%

Subtotal SBE who are suppliers: 0.76 % X 0.6 = 0.46 % (discounted to 60%)

Total Percentage of SBE Utilization: 2.54 %

SPRING HARBOR AT MASTHEAD (NAUTILUS POND)

CONTRACT NO. 8325

DATE: 2/7/19

R.G. Huston Co., Inc.

Item	Quantity	Price	Extension
Section B: Proposal Page			
10701 - TRAFFIC CONTROL - LUMP SUM	1.00	\$2,390.00	\$2,390.00
10721 - TRAFFIC CONTROL SIGN - PORTABLE CHANGEABLE MESSAGE - DAYS	7.00	\$125.00	\$875.00
10911 - MOBILIZATION - LUMP SUM	1.00	\$33,502.78	\$33,502.78
20101 - EXCAVATION CUT - C.Y.	7416.00	\$16.50	\$122,364.00
20140 - GEOTEXTILE FABRIC TYPE SAS NON WOVEN - S.Y.	1310.00	\$5.75	\$7,532.50
20217 - CLEAR STONE - TON	425.00	\$12.00	\$5,100.00
20221 - TOPSOIL - S.Y.	12528.00	\$5.55	\$69,530.40
20226 - LIGHT RIPRAP - GLACIAL FIELD STONE - TON	260.00	\$52.00	\$13,520.00
20233 - RIPRAP FILTER FABRIC, TYPE HR - S.Y.	65.00	\$3.05	\$198.25
20312 - REMOVE CATCHBASIN - EACH	2.00	\$475.00	\$950.00
20314 - REMOVE PIPE - L.F.	120.00	\$33.00	\$3,960.00
20404 - CLEARING - LUMP SUM	1.00	\$41,925.00	\$41,925.00
21002 - EROSION CONTROL INSPECTION - EACH	7.00	\$550.00	\$3,850.00
21011 - CONSTRUCTION ENTRANCE - EACH	2.00	\$550.00	\$1,100.00
21013 - STREET SWEEPING - LUMP SUM	1.00	\$6,000.00	\$6,000.00
21014 - CLEAR STONE BERM (DITCH CHECK) - EACH	3.00	\$1,000.00	\$3,000.00
21018 - SILT SOCK (8 INCH) - PROVIDE, INSTALL & MAINTAIN - LF	500.00	\$5.50	\$2,750.00
21019 - SILT SOCK (8 INCH) - REMOVE & RESTORE - LF	500.00	\$2.50	\$1,250.00
21022 - SILT FENCE - PROVIDE, INSTALL & MAINTAIN - L.F.	1000.00	\$2.50	\$2,500.00
21023 - SILT FENCE - REMOVE & RESTORE - L.F.	1000.00	\$1.00	\$1,000.00
21056 - INLET PROTECTION, TYPE D HYBRID - PROVIDE & INSTALL - EACH	10.00	\$190.00	\$1,900.00
21057 - INLET PROTECTION, TYPE D HYBRID - MAINTAIN - EACH	20.00	\$55.00	\$1,100.00
21058 - INLET PROTECTION, TYPE D HYBRID - REMOVE - EACH	10.00	\$30.00	\$300.00
21061 - EROSION MATTING, CLASS I, URBAN TYPE A - S.Y.	13780.00	\$1.85	\$25,493.00
21073 - EROSION MATTING, CLASS II, TYPE C - ORGANIC - S.Y.	980.00	\$4.80	\$4,704.00
21081 - EROSION MATTING, CLASS III TYPE A - S.Y.	807.00	\$5.00	\$4,035.00
40102 - CRUSHED AGGREGATE BASE COURSE, GRADATION NO. 2 - TON	1492.00	\$22.00	\$32,824.00
50211 - SELECT BACKFILL FOR STORM SEWER - T.F.	307.00	\$0.01	\$3.07
50401 - 12 INCH TYPE I RCP STORM SEWER PIPE - L.F.	146.00	\$66.00	\$9,636.00
50403 - 18 INCH TYPE 1 RCP STORM SEWER PIPE (UNDISTRIBUTED) - L.F.	146.00	\$70.00	\$10,220.00
50410 - 42 INCH TYPE 1 RCP STORM SEWER PIPE - L.F.	90.00	\$132.00	\$11,880.00
50411 - 48 INCH TYPE 1 RCP STORM SEWER PIPE - L.F.	71.00	\$155.00	\$11,005.00
50461 - 12 INCH RCP AE - EACH	3.00	\$1,000.00	\$3,000.00
50463 - 18 INCH RCP AE (UNDISTRIBUTED) - EACH	2.00	\$1,070.00	\$2,140.00
50469 - 42 INCH RCP AE - EACH	1.00	\$1,700.00	\$1,700.00
50470 - 48 INCH RCP AE - EACH	2.00	\$2,030.00	\$4,060.00
50601 - 12 INCH RCP AE GATE - EACH	3.00	\$510.00	\$1,530.00
50603 - 18 INCH AE GATE (UNDISTRIBUTED) - EACH	2.00	\$600.00	\$1,200.00
50609 - 42 INCH RCP AE GATE - EACH	1.00	\$1,650.00	\$1,650.00
50610 - 48 INCH RCP AE GATE - EACH	2.00	\$1,850.00	\$3,700.00
50741 - TYPE "H" INLET - EACH	1.00	\$2,600.00	\$2,600.00
50801 - UTILITY LINE OPENING (ULO) - EACH	1.00	\$615.00	\$615.00
90030 - STORMWATER CONTROL - LUMP SUM	1.00	\$4,000.00	\$4,000.00
90031 - GROUNDWATER CONTROL/SITE DEWATERING - LUMP SUM	1.00	\$100.00	\$100.00
90032 - 6X10 STORM STRUCTURE W/ INTERNAL WEIR - EACH	1.00	\$21,900.00	\$21,900.00
90033 - 6X14 STORM STRUCTURE - EACH	1.00	\$23,150.00	\$23,150.00
90034 - GALVANIZED STEEL GUARDRAIL - L.F.	21.00	\$360.00	\$7,560.00
90035 - BOULDERS - TON	122.00	\$93.00	\$11,346.00
90036 - RIVER COBBLES - TON	185.00	\$93.00	\$17,205.00
90037 - IRON ENHANCED FILTER - S.F.	9120.00	\$14.65	\$133,608.00
90038 - FILTER UNDERDRAIN - L.F.	750.00	\$11.00	\$8,250.00
90039 - INFILTRATION TRENCH - T.F.	100.00	\$20.00	\$2,000.00
90041 - POLYMER SETTLING - LB	13.00	\$38.00	\$494.00
90042 - TRASH SEGREGATION AND DISPOSAL - LUMP SUM	1.00	\$100.00	\$100.00

SPRING HARBOR AT MASTHEAD (NAUTILUS POND)

CONTRACT NO. 8325

DATE: 2/7/19

R.G. Huston Co., Inc.

Item	Quantity	Price	Extension
90043 - TEMPORARY FENCING - L.F.	800.00	\$3.50	\$2,800.00
90044 - FILTER UNDERDRAIN CLEANOUT - EACH	5.00	\$650.00	\$3,250.00
90045 - QUICK GROW NATIVE SEED MIX - S.Y.	12528.00	\$1.75	\$21,924.00
57 Items	Totals		\$716,280.00



Department of Public Works
Engineering Division
Robert F. Phillips, P.E., City Engineer
City-County Building, Room 115
210 Martin Luther King, Jr. Boulevard
Madison, Wisconsin 53703
Phone: (608) 266-4751
Fax: (608) 264-9275
engineering@cityofmadison.com
www.cityofmadison.com/engineering

Assistant City Engineer
Gregory T. Fries, P.E.
Kathleen M. Cryan
Principal Engineer 2
Christopher J. Petykowski, P.E.
John S. Fahrney, P.E.
Principal Engineer 1
Christina M. Bachmann, P.E.
Eric L. Dundee, P.E.
Facilities & Sustainability
Jeanne E. Hoffman, Manager
Mapping Section Manager
Eric T. Pederson, P.S.
Financial Manager
Steven B. Danner-Rivers

BIENNIAL BID BOND

R.G. Huston Co., Inc.

(a corporation of the State of Wisconsin
(individual), (partnership), (hereinafter referred to as the "Principal") and
Travelers Casualty and Surety Company of America

a corporation of the State of Connecticut (hereinafter referred to as the "Surety") and licensed to do business in the State of Wisconsin, are held and firmly bound unto the City of Madison, Wisconsin (hereinafter referred to as the "City"), in the sum equal to the individual proposal guaranty amounts of the total bid or bids of the Principal herein accepted by the City, for the payment of which the Principal and the Surety hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns.

The condition of this obligation is that the Principal has submitted to the City certain bids for projects from the time period of February 1, 2018 through January 31, 2020.

If the Principal is awarded the contract(s) by the City and, within the time and manner required by law after the prescribed forms are presented for its signature, the Principal enters into (a) written contract(s) in accordance with the bid(s), and files with the City its bond(s) guaranteeing faithful performance and payment for all labor and materials, as required by law, or if the City rejects all bids for the work described, then this obligation shall be null and void; otherwise, it shall remain in full force and effect.

In the event the Principal shall fail to execute and deliver the contract(s) or the performance and payment bond(s), all within the time specified or any extension thereof, the Principal and Surety agree jointly and severally to pay to the City within ten (10) calendar days of written demand a total equal to the sum of the individual proposal guaranty amounts of the total bid(s) as liquidated damages.

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

This bond may be terminated by the Surety upon giving thirty (30) days written notice to the City of its intent to terminate this bond and to be released and discharged therefrom, but such termination shall not operate to relieve or discharge the Surety from any liability already accrued or which shall accrue before the expiration of such thirty (30) day period.

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.

PRINCIPAL

R.G. Huston Co., Inc.
COMPANY NAME

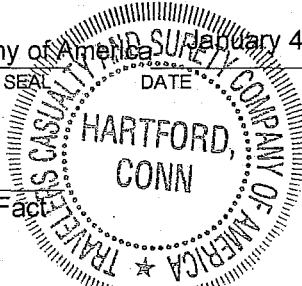


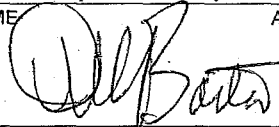
January 8, 2018

By: 
SIGNATURE AND TITLE

SURETY

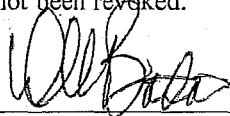
Travelers Casualty and Surety Company of America
COMPANY NAME AFFIX SEAL DATE January 4, 2018



By: 
SIGNATURE AND TITLE Attorney-in-Fact

This certifies that I have been duly licensed as an agent for the Surety in Wisconsin under National Provider No. 283633 for the year 2018 and appointed as attorney in fact with authority to execute this bid bond, which power of attorney has not been revoked.

January 4, 2018
DATE


AGENT SIGNATURE

20975 Swenson Drive - Suite 175
ADDRESS

Waukesha, Wisconsin 53186
CITY, STATE AND ZIP CODE

262-317-8044
TELEPHONE NUMBER

Note to Surety and Principal: Any bid submitted which this bond guarantees may be rejected if the Power of Attorney form showing that the Agent of Surety is currently authorized to execute bonds on behalf of Surety is not attached to this bond.



POWER OF ATTORNEY

Farmington Casualty Company
Fidelity and Guaranty Insurance Company
Fidelity and Guaranty Insurance Underwriters, Inc.
St. Paul Fire and Marine Insurance Company
St. Paul Guardian Insurance Company

St. Paul Mercury Insurance Company
Travelers Casualty and Surety Company
Travelers Casualty and Surety Company of America
United States Fidelity and Guaranty Company

Attorney-In Fact No. 232082

Certificate No. 007269866

KNOW ALL MEN BY THESE PRESENTS: That Farmington Casualty Company, St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company are corporations duly organized under the laws of the State of Connecticut, that Fidelity and Guaranty Insurance Company is a corporation duly organized under the laws of the State of Iowa, and that Fidelity and Guaranty Insurance Underwriters, Inc., is a corporation duly organized under the laws of the State of Wisconsin (herein collectively called the "Companies"), and that the Companies do hereby make, constitute and appoint

Anthony S. Von Rueden, Todd Looker, Robert E Flath, Dennis M Barton, Joseph L Vigna, and Elizabeth M Fedyn

of the City of Milwaukee/Waukesha, State of Wisconsin, their true and lawful Attorney(s)-in-Fact, each in their separate capacity if more than one is named above, to sign, execute, seal and acknowledge any and all bonds, recognizances, conditional undertakings and other writings obligatory in the nature thereof on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

IN WITNESS WHEREOF, the Companies have caused this instrument to be signed and their corporate seals to be hereto affixed, this 19th day of June, 2017.

Farmington Casualty Company
Fidelity and Guaranty Insurance Company
Fidelity and Guaranty Insurance Underwriters, Inc.
St. Paul Fire and Marine Insurance Company
St. Paul Guardian Insurance Company

St. Paul Mercury Insurance Company
Travelers Casualty and Surety Company
Travelers Casualty and Surety Company of America
United States Fidelity and Guaranty Company



State of Connecticut
City of Hartford ss.

By: [Signature]
Robert L. Raney, Senior Vice President

On this the 19th day of June, 2017, before me personally appeared Robert L. Raney, who acknowledged himself to be the Senior Vice President of Farmington Casualty Company, Fidelity and Guaranty Insurance Company, Fidelity and Guaranty Insurance Underwriters, Inc., St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company, and that he, as such, being authorized so to do, executed the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

In Witness Whereof, I hereunto set my hand and official seal.
My Commission expires the 30th day of June, 2021.



[Signature]
Marie C. Tetreault, Notary Public

This Power of Attorney is granted under and by the authority of the following resolutions adopted by the Boards of Directors of Farmington Casualty Company, Fidelity and Guaranty Insurance Company, Fidelity and Guaranty Insurance Underwriters, Inc., St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company, which resolutions are now in full force and effect, reading as follows:

RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President, any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary may appoint Attorneys-in-Fact and Agents to act for and on behalf of the Company and may give such appointee such authority as his or her certificate of authority may prescribe to sign with the Company's name and seal with the Company's seal bonds, recognizances, contracts of indemnity, and other writings obligatory in the nature of a bond, recognizance, or conditional undertaking, and any of said officers or the Board of Directors at any time may remove any such appointee and revoke the power given him or her; and it is

FURTHER RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President may delegate all or any part of the foregoing authority to one or more officers or employees of this Company, provided that each such delegation is in writing and a copy thereof is filed in the office of the Secretary; and it is

FURTHER RESOLVED, that any bond, recognizance, contract of indemnity, or writing obligatory in the nature of a bond, recognizance, or conditional undertaking shall be valid and binding upon the Company when (a) signed by the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary and duly attested and sealed with the Company's seal by a Secretary or Assistant Secretary; or (b) duly executed (under seal, if required) by one or more Attorneys-in-Fact and Agents pursuant to the power prescribed in his or her certificate or their certificates of authority or by one or more Company officers pursuant to a written delegation of authority; and it is

FURTHER RESOLVED, that the signature of each of the following officers: President, any Executive Vice President, any Senior Vice President, any Vice President, any Assistant Vice President, any Secretary, any Assistant Secretary, and the seal of the Company may be affixed by facsimile to any Power of Attorney or to any certificate relating thereto appointing Resident Vice Presidents, Resident Assistant Secretaries or Attorneys-in-Fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, and any such Power of Attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by such facsimile signature and facsimile seal shall be valid and binding on the Company in the future with respect to any bond or understanding to which it is attached.

I, Kevin E. Hughes, the undersigned, Assistant Secretary, of Farmington Casualty Company, Fidelity and Guaranty Insurance Company, Fidelity and Guaranty Insurance Underwriters, Inc., St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 4th day of January, 20 18.

Kevin E. Hughes
Kevin E. Hughes, Assistant Secretary



To verify the authenticity of this Power of Attorney, call 1-800-421-3880 or contact us at www.travelersbond.com. Please refer to the Attorney-In-Fact number, the above-named individuals and the details of the bond to which the power is attached.

SECTION H: AGREEMENT

THIS AGREEMENT made this 6th day of March in the year Two Thousand and Nineteen between R. G. HUSTON CO., INC. 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 MARCH 5, 2019, 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:

SPRING HARBOR AT MASTHEAD (NAUTILUS POND) CONTRACT NO. 8325

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 SEVEN HUNDRED SIXTEEN THOUSAND TWO HUNDRED EIGHTY AND NO/100 (\$716,280.00) 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 ten thousand dollars (\$10,000), 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.

**SPRING HARBOR AT MASTHEAD (NAUTILUS POND)
CONTRACT NO. 8325**

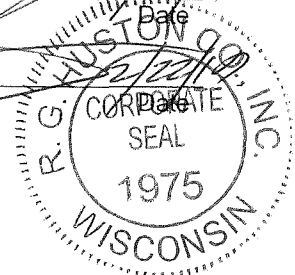
IN WITNESS WHEREOF, the Contractor has hereunto set his/her hand and seal and the City has caused this contract to be sealed with its corporate seal and to be executed by its Mayor and City Clerk on the dates written below.

Countersigned:

[Signature] 2/22/19
Witness Date
[Signature] 2/22/19
Witness Date

R. G. HUSTON CO., INC.

Company Name
[Signature] 2/22/19
President Date
[Signature] 2/22/19
Secretary Date



CITY OF MADISON, WISCONSIN

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

Approved as to form:

[Signature] 3.25.19
Finance Director Date
[Signature] 3.27.19
Witness Date
[Signature] 3/13/19
Witness Date

[Signature]
City Attorney Date
[Signature] 3.27.19
Mayor Date
[Signature] 3.13.19
City Clerk Date

SECTION I: PAYMENT AND PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS, that we R. G. HUSTON CO., INC. as principal,
and Travelers Casualty and Surety Company of America
Company of Hartford, Connecticut as surety, are held and firmly bound unto the City of
Madison, Wisconsin, in the sum of **SEVEN HUNDRED SIXTEEN THOUSAND TWO HUNDRED EIGHTY
AND NO/100 (\$716,280.00)** 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:

**SPRING HARBOR AT MASTHEAD (NAUTILUS POND)
CONTRACT NO. 8325**

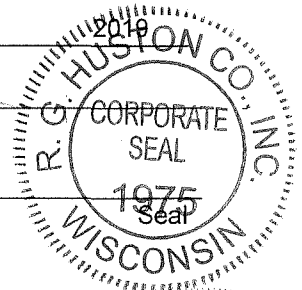
in Madison, Wisconsin, and shall pay all claims for labor performed and material furnished in the
prosecution of said work, and save the City harmless from all claims for damages because of negligence
in the prosecution of said work, and shall save harmless the said City from all claims for compensation
(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 6th day of March

Countersigned:

[Signature]
Witness
[Signature]
Secretary

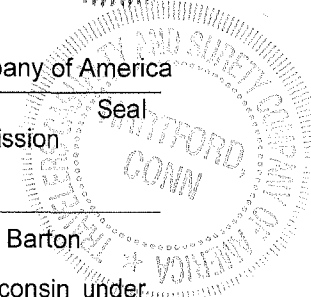
R. G. HUSTON CO. INC.
Company Name (Principal)
[Signature]
President



Approved as to form:

[Signature]
City Attorney

Travelers Casualty and Surety Company of America
Surety
 Salary Employee Commission Seal
By [Signature]
Attorney-in-Fact Dennis M. Barton



This certifies that I have been duly licensed as an agent for the above company in Wisconsin under
National Producer Number 283633 for the year 2019, and appointed as attorney-in-fact
with authority to execute this payment and performance bond which power of attorney has not been
revoked.

March 6, 2019
Date

[Signature]
Agent Signature



**Travelers Casualty and Surety Company of America
Travelers Casualty and Surety Company
St. Paul Fire and Marine Insurance Company**

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That Travelers Casualty and Surety Company of America, Travelers Casualty and Surety Company, and St. Paul Fire and Marine Insurance Company are corporations duly organized under the laws of the State of Connecticut (herein collectively called the "Companies"), and that the Companies do hereby make, constitute and appoint **DENNIS M BARTON** of **MILWAUKEE**

Wisconsin, their true and lawful Attorney-in-Fact to sign, execute, seal and acknowledge any and all bonds, recognizances, conditional undertakings and other writings obligatory in the nature thereof on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

IN WITNESS WHEREOF, the Companies have caused this instrument to be signed, and their corporate seals to be hereto affixed, this **3rd** day of **February**, 2017.



State of Connecticut

City of Hartford ss.

By:
Robert L. Raney, Senior Vice President

On this the **3rd** day of **February**, 2017, before me personally appeared **Robert L. Raney**, who acknowledged himself to be the Senior Vice President of Travelers Casualty and Surety Company of America, Travelers Casualty and Surety Company, and St. Paul Fire and Marine Insurance Company, and that he, as such, being authorized so to do, executed the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

In Witness Whereof, I hereunto set my hand and official seal.

My Commission expires the **30th** day of **June**, 2021



Marie C. Tetreault, Notary Public

This Power of Attorney is granted under and by the authority of the following resolutions adopted by the Boards of Directors of Travelers Casualty and Surety Company of America, Travelers Casualty and Surety Company, and St. Paul Fire and Marine Insurance Company, which resolutions are now in full force and effect, reading as follows:

RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President, any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary may appoint Attorneys-in-Fact and Agents to act for and on behalf of the Company and may give such appointee such authority as his or her certificate of authority may prescribe to sign with the Company's name and seal with the Company's seal bonds, recognizances, contracts of indemnity, and other writings obligatory in the nature of a bond, recognizance, or conditional undertaking, and any of said officers or the Board of Directors at any time may remove any such appointee and revoke the power given him or her; and it is

FURTHER RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President may delegate all or any part of the foregoing authority to one or more officers or employees of this Company, provided that each such delegation is in writing and a copy thereof is filed in the office of the Secretary; and it is

FURTHER RESOLVED, that any bond, recognizance, contract of indemnity, or writing obligatory in the nature of a bond, recognizance, or conditional undertaking shall be valid and binding upon the Company when (a) signed by the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary and duly attested and sealed with the Company's seal by a Secretary or Assistant Secretary; or (b) duly executed (under seal, if required) by one or more Attorneys-in-Fact and Agents pursuant to the power prescribed in his or her certificate or their certificates of authority or by one or more Company officers pursuant to a written delegation of authority; and it is

FURTHER RESOLVED, that the signature of each of the following officers: President, any Executive Vice President, any Senior Vice President, any Vice President, any Assistant Vice President, any Secretary, any Assistant Secretary, and the seal of the Company may be affixed by facsimile to any Power of Attorney or to any certificate relating thereto appointing Resident Vice Presidents, Resident Assistant Secretaries or Attorneys-in-Fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, and any such Power of Attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by such facsimile signature and facsimile seal shall be valid and binding on the Company in the future with respect to any bond or understanding to which it is attached.

I, **Kevin E. Hughes**, the undersigned, Assistant Secretary of Travelers Casualty and Surety Company of America, Travelers Casualty and Surety Company, and St. Paul Fire and Marine Insurance Company, do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which remains in full force and effect.

Dated this **6th** day of **March**, 2019



Kevin E. Hughes, Assistant Secretary

**To verify the authenticity of this Power of Attorney, please call us at 1-800-421-3880.
Please refer to the above-named Attorney-in-Fact and the details of the bond to which the power is attached.**