

CITY OF ANN ARBOR
INVITATION TO BID



School Girls Glen Culvert Replacement – Nichols Drive

ITB No. 4689

Due Date: Thursday, September 2nd 2021 at 2:00 PM (Local Time)

Public Services/Engineering

Issued By:

City of Ann Arbor
Procurement Unit
301 E. Huron Street
Ann Arbor, MI 48104

ADDENDUM No. 1

ITB No. 4689

School Girls Glen Culvert Replacement – Nichols Drive

Due: September 2, 2021 at 2:00 P.M. (local time)

The information contained herein shall take precedence over the original documents and all previous addenda (if any) and is appended thereto. **This Addendum includes fifty-three (53) pages, and one (1) plan sheet.**

The Proposer is to acknowledge receipt of this Addendum No. 1, including all attachments in its Proposal by so indicating in the proposal that the addendum has been received. Proposals submitted without acknowledgement of receipt of this addendum may be considered non-conforming.

The following forms provided within the ITB Document should be included in submitted proposal:

- Attachment - City of Ann Arbor Non-Discrimination Declaration of Compliance
- Attachment - City of Ann Arbor Living Wage Declaration of Compliance
- Attachment - Vendor Conflict of Interest Disclosure Form of the RFP Document

Proposals that fail to provide these completed forms listed above upon proposal opening may be rejected as non-responsive and may not be considered for award.

I. CORRECTIONS/ADDITIONS/DELETIONS

Changes to the ITB documents which are outlined below are referenced to a page or Section in which they appear conspicuously. Offerors are to take note in its review of the documents and include these changes as they may affect work or details in other areas not specifically referenced here.

Section/Page(s)	Change
Bid Form – 2 pp	Remove and replace BF-1 and BF-2 with the attached Bid Form <ul style="list-style-type: none">• Items changes on BF-2:<ul style="list-style-type: none">○ REMOVE: Line Item #28 “Embankment, Structure, CIP” from the Bid Form, as this quantity of embankment is covered under the pay item for “Subgrade Undercutting, Modified”.○ ADD: Line Item #40 “Arboretum Plantings, Reimbursement [Allowance]” with a Dollar allowance of \$5000. This item will covers the cost of any special plantings the Arboretum will require during restoration of the disturbed areas. Use of this item is by approval from the City ONLY.
Plan Sheet Sketch (Pg. 4)	Review the sketch for the additional allowable areas of disturbance on the SW and NE quadrant of the culvert crossing. The Arboretum will allow the contractor to disturb, remove, and restore the plant life in the areas hatched out in “RED”. This area extends approximately

45 feet west from the west end of the southern headwall, and approximately 30 feet east from the east end of the existing northern headwall.

- The Contractor will be responsible for working with the City and Arboretum staff to determine the final limits of allowable disturbance. Within these limits, there could be plants or trees that need protecting and the Contractor will be responsible to avoid at all times.
- Storage of granular material in these areas are prohibited. The Contractor may store equipment, vehicles, or other material (non-granular) or may use this area to park their equipment when not in use.
- The Contractor will be responsible for restoring all areas with the same restoration as detailed in the plans (topsoil, seed, and mulch).Page 11 Remove: "These personnel must be a licensed physician, licensed psychologist or licensed psychiatrist."

Geotechnical Report – 31 pp ADD the attached "Geotechnical Report – MTC Project No. 201675" to the Contract Documents.

EGLE Permit – 16 pp ADD the attached "EGLE Notice of Authorization – Issued Permit WRP029128 School Girl's Glen – Nichols Drive Culvert" to the Contract Documents.

Sign-In sheet – 2 pp Pre-Bid Meeting Sign-In Sheet

II. QUESTIONS AND ANSWERS

The following Questions have been received by the City. Responses are being provided in accordance with the terms of the RFP. Respondents are directed to take note in its review of the documents of the following questions and City responses as they affect work or details in other areas not specifically referenced here.

Question 1: **What is the Engineer's Estimate for the project?**

Answer 1: \$279,000.00

Question 2: **Can you let me know what the approved truck route from the storage yard on Main to the job would be? I assume we wouldn't been able to use Depot/Fuller Street with loaded dump trucks.**

Answer 2: *Depot/Fuller are major streets and can be used as the most direct route from 721 to Nichols Drive*

Offerors are responsible for any conclusions that they may draw from the information contained in the Addendum.

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APPENDIX

- Geotechnical Report*
- EGLE Permit*
- Pre-bid meeting sign in*
- Additional area plan sheet*

ATTACHMENTS

- City of Ann Arbor Prevailing Wage Declaration Form*
- City of Ann Arbor Living Wage Forms*
- City of Ann Arbor Vendor Conflict of Interest Disclosure Form*
- City of Ann Arbor Non-Discrimination Ordinance Declaration Form and Notice Geotechnical Report – MTC Project No. 201675*

NOTICE OF PRE-BID CONFERENCE

A pre-bid conference for this project will be held on **Thursday, August 19, at 10:00 A.M. at the Schoolgirls Glen project site. To reach the site, turn onto Nichols Drive from East Medical Center Drive (across from U of M main hospital) and proceed through the gate at the end of the lower parking lot.**

Attendance at this conference is highly recommended. Administrative and technical questions regarding this project will be answered at this time. The pre-bid conference is for information only. Any answers furnished will not be official until verified in writing by the Financial Service Area, Procurement Unit. Answers that change or substantially clarify the bid will be affirmed in an addendum.

INSTRUCTIONS TO BIDDERS

General

Work to be done under this Contract is generally described through the detailed specifications and must be completed fully in accordance with the contract documents. All work to be done under this Contract is located in or near the City of Ann Arbor.

Any Bid which does not conform fully to these instructions may be rejected.

Preparation of Bids

Bids should be prepared providing a straight-forward, concise description of the Bidder's ability to meet the requirements of the ITB. Bids shall be written in ink or typewritten. No erasures are permitted. Mistakes may be crossed out and corrected and must be initialed and dated in ink by the person signing the Bid.

Bids must be submitted on the "Bid Forms" provided with each blank properly filled in. If forms are not fully completed it may disqualify the bid. No alternative bid will be considered unless alternative bids are specifically requested. If alternatives are requested, any deviation from the specification must be fully described, in detail on the "Alternate" section of Bid form.

Each person signing the Bid certifies that he/she is the person in the Bidder's firm/organization responsible for the decision as to the fees being offered in the Bid and has not and will not participated in any action contrary to the terms of this provision.

Questions or Clarifications / Designated City Contacts

All questions regarding this ITB shall be submitted via email. Emailed questions and inquires will be accepted from any and all prospective Bidders in accordance with the terms and conditions of the ITB.

All questions shall be due on or before **Thursday, August 26, 2021 by 10:00 AM local time** and should be addressed as follows:

Specification/Scope of Work questions emailed to BSlizewski@a2gov.org
Bid Process and Compliance questions emailed to cspencer@a2gov.org

Any error, omissions or discrepancies in the specification discovered by a prospective contractor and/or service provider shall be brought to the attention of **Brian Slizewski** at BSlizewski@a2gov.org after discovery as possible. Further, the contractor and/or service provide shall not be allowed to take advantage of errors, omissions or discrepancies in the specifications.

Addenda

If it becomes necessary to revise any part of the ITB, notice of the Addendum will be posted to Michigan Inter-governmental Trade Network (MITN) www.mitn.info and/or City of Ann Arbor web site www.A2gov.org for all parties to download.

Each Bidder must in its Bid, to avoid any miscommunications, acknowledge all addenda which it has received; but the failure of a Bidder to receive, or acknowledge receipt of; any addenda shall

not relieve the Bidder of the responsibility for complying with the terms thereof.

The City will not be bound by oral responses to inquiries or written responses other than written addenda.

Bid Submission

All Bids are due and must be delivered to the City of Ann Arbor Procurement Unit on or before **September 2nd, 2021 at 2:00 PM (local time)**. Bids submitted late or via oral, telephonic, telegraphic, electronic mail or facsimile **will not** be considered or accepted.

Each Bidder must submit one (1) original Bid and two (2) Bid copies in a sealed envelope clearly marked: **ITB No. 4689 School Girls Glen Culvert Replacement – Nichols Drive**.

Bids must be addressed and delivered to:

City of Ann Arbor
Procurement Unit,
c/o Customer Services, 1st Floor
301 East Huron Street
Ann Arbor, MI 48104

All Bids received on or before the Due Date will be publicly opened and recorded immediately. No immediate decisions are rendered.

The following forms provided within this ITB Document should be included in submitted bids.

- **City of Ann Arbor Prevailing Wage Declaration of Compliance**
- **City of Ann Arbor Living Wage Ordinance Declaration of Compliance**
- **Vendor Conflict of Interest Disclosure Form**
- **City of Ann Arbor Non-Discrimination Ordinance Declaration of Compliance**

Bids that fail to provide these forms listed above upon bid opening may be rejected as non-responsive and may not be considered for award.

Hand delivered bids may be dropped off in the Purchasing drop box located in the Ann Street (north) vestibule/entrance of City Hall which is accessible to the public at all hours. The City will not be liable to any Bidder for any unforeseen circumstances, delivery or postal delays. Postmarking to the Due Date will not substitute for receipt of the Bid. Each Bidder is responsible for submission of their Bid.

Additional time for submission of bids past the stated due date and time will not be granted to a single Bidder; however, additional time may be granted to all Bidders when the City determines in its sole discretion that circumstances warrant it.

Award

The City intends to award a Contract(s) to the lowest responsible Bidder(s). On multi-divisional contracts, separate divisions may be awarded to separate Bidders. The City may also utilize alternatives offered in the Bid Forms, if any, to determine the lowest responsible Bidder on each division, and award multiple divisions to a single Bidder, so that the lowest total cost is achieved for the City. For unit price bids, the Contract will be awarded based upon the unit prices and the

lump sum prices stated by the bidder for the work items specified in the bid documents, with consideration given to any alternates selected by the City. If the City determines that the unit price for any item is materially different for the work item bid than either other bidders or the general market, the City, in its sole discretion, in addition to any other right it may have, may reject the bid as not responsible or non-conforming.

The acceptability of major subcontractors will be considered in determining if a Bidder is responsible. In comparing Bids, the City will give consideration to alternate Bids for items listed in the bid forms. All key staff and subcontractors are subject to the approval by the City.

Official Documents

The City of Ann Arbor officially distributes bid documents from the Procurement Unit or through the Michigan Intergovernmental Trade Network (MITN). Copies of the bid documents obtained from any other source are not Official copies. Addenda and other bid information will only be posted to these official distribution sites. If you obtained City of Ann Arbor Bid documents from other sources, it is recommended that you register on www.MITN.info and obtain an official Bid. Bidders do not need to be shown on the plan holders list provided by MITN to be considered an official plan holder.

Bid Security

Each bid must be accompanied by a certified check, or Bid Bond by a surety licensed and authorized to do business within the State of Michigan, in the amount of 5% of the total of the bid price.

Withdrawal of Bids

After the time of opening, no Bid may be withdrawn for the period of sixty (60) days

Contract Time

Time is of the essence in the performance of the work under this Contract. The available time for work under this Contract is indicated on page C-2, Article III of the Contract. If these time requirements can not be met, the Bidder must stipulate on Bid Form Section 3 - Time Alternate its schedule for performance of the work. Consideration will be given to time in evaluating bids.

Liquidated Damages

A liquidated damages clause, as given on page C-2, Article III of the Contract, provides that the Contractor shall pay the City as liquidated damages, and not as a penalty, a sum certain per day for each and every day that the Contractor may be in default of completion of the specified work, within the time(s) stated in the Contract, or written extensions.

Liquidated damages clauses, as given in the General Conditions, provide further that the City shall be entitled to impose and recover liquidated damages for breach of the obligations under Chapter 112 of the City Code.

The liquidated damages are for the non-quantifiable aspects of any of the previously identified events and do not cover actual damages that can be shown or quantified nor are they intended to preclude recovery of actual damages in addition to the recovery of liquidated damages.

Human Rights Information

All contractors proposing to do business with the City shall satisfy the contract compliance administrative policy adopted by the City Administrator in accordance with the Section 9:158 of the Ann Arbor City Code. Breach of the obligation not to discriminate as outlined in Section 5, beginning at page GC-2 shall be a material breach of the contract. Contractors are required to post a copy of Ann Arbor's Non-Discrimination Ordinance attached at all work locations where its employees provide services under a contract with the City.

Wage Requirements

Section 4, beginning at page GC-1, outlines the requirements for payment of prevailing wages and for payment of a "living wage" to employees providing service to the City under this contract. The successful bidder and its subcontractors must comply with all applicable requirements and provide proof of compliance.

Pursuant to Resolution R-16-469 all public improvement contractors are subject to prevailing wage and will be required to provide to the City payroll records sufficient to demonstrate compliance with the prevailing wage requirements. Use of the Sample Certified Payroll form provided in the Appendix section or a City-approved equivalent will be required along with wage rate interviews.

For laborers whose wage level are subject to federal, state and/or local prevailing wage law the appropriate Davis-Bacon wage rate classification is identified based upon the work including within this contract. **The wage determination(s) current on the date 10 days before bids are due shall apply to this contract.** The U.S. Department of Labor (DOL) has provided explanations to assist with classification in the following resource link: beta.SAM.gov.

For the purposes of this ITB the Construction Type of Heavy and Highway will apply.

Conflict Of Interest Disclosure

The City of Ann Arbor Purchasing Policy requires that prospective Vendors complete a Conflict of Interest Disclosure form. A contract may not be awarded to the selected Vendor unless and until the Procurement Unit and the City Administrator have reviewed the Disclosure form and determined that no conflict exists under applicable federal, state, or local law or administrative regulation. Not every relationship or situation disclosed on the Disclosure Form may be a disqualifying conflict. Depending on applicable law and regulations, some contracts may awarded on the recommendation of the City Administrator after full disclosure, where such action is allowed by law, if demonstrated competitive pricing exists and/or it is determined the award is in the best interest of the City. A copy of the Vendor Conflict of Interest Disclosure Form is attached.

Major Subcontractors

The Bidder shall identify on Bid Form Section 4 each major subcontractor it expects to engage for this Contract if the work to be subcontracted is 15% or more of the bid sum or over \$50,000, whichever is less. The Bidder also shall identify the work to be subcontracted to each major subcontractor. The Bidder shall not change or replace a subcontractor without approval by the City.

Debarment

Submission of a Bid in response to this ITB is certification that the Bidder is not currently debarred,

suspended, proposed for debarment, and declared ineligible or voluntarily excluded from participation in this transaction by any State or Federal departments or agency. Submission is also agreement that the City will be notified of any changes in this status.

Disclosures

After bids are opened, all information in a submitter's bid is subjected to disclosure under the provisions of Michigan Public Act No. 442 of 1976, as amended (MCL 15.231 et seq.) known as the "Freedom of Information Act." The Freedom of Information Act also provides for the complete disclosure of contracts and attachments thereto except where specifically exempted.

Bid Protest

All Bid protests must be in writing and filed with the Purchasing Agent within five (5) business days of the award action. The bidder must clearly state the reasons for the protest. If a bidder contacts a City Service Area/Unit and indicates a desire to protest an award, the Service Area/Unit shall refer the bidder to the Purchasing Agent. The Purchasing Agent will provide the bidder with the appropriate instructions for filing the protest. The protest shall be reviewed by the City Administrator or designee whose decision shall be final.

Any inquiries or requests regarding this procurement should be only submitted in writing to the Designated City Contacts provided herein. Attempts by any prospective bidder to initiate contact with anyone other than the Designated City Contacts provided herein that the bidder believes can influence the procurement decision, e.g., Elected Officials, City Administrator, Selection Committee Members, Appointed Committee Members, etc., may lead to immediate elimination from further consideration.

Cost Liability

The City of Ann Arbor assumes no responsibility or liability for costs incurred by the Bidder prior to the execution of a contract with the City. By submitting a bid, a bidder agrees to bear all costs incurred or related to the preparation, submission and selection process for the bid.

Reservation of Rights

The City of Ann Arbor reserves the right to accept any bid or alternative bid proposed in whole or in part, to reject any or all bids or alternatives bids in whole or in part and to waive irregularity and/or informalities in any bid and to make the award in any manner deemed in the best interest of the City.

Idlefree Ordinance

The City of Ann Arbor adopted an idling reduction Ordinance that went into effect July 1, 2017. The full text of the ordinance (including exemptions) can be found at: www.a2gov.org/idlefree.

Under the ordinance, No Operator of a Commercial Vehicle shall cause or permit the Commercial Vehicle to Idle:

- (a) For any period of time while the Commercial Vehicle is unoccupied; or
- (b) For more than 5 minutes in any 60-minute period while the Commercial Vehicle is occupied.

In addition, generators and other internal combustion engines are covered

- (1) Excluding Motor Vehicle engines, no internal combustion engine shall be operated except

when it is providing power or electrical energy to equipment or a tool that is actively in use.

Environmental Commitment

The City of Ann Arbor recognizes its responsibility to minimize negative impacts on human health and the environment while supporting a vibrant community and economy. The City further recognizes that the products and services the City buys have inherent environmental and economic impacts and that the City should make procurement decisions that embody, promote, and encourage the City's commitment to the environment.

The City encourages potential vendors to bring forward emerging and progressive products and services that are best suited to the City's environmental principles.

INVITATION TO BID

City of Ann Arbor
Guy C. Larcom Municipal Building
Ann Arbor, Michigan 48107

Ladies and Gentlemen:

The undersigned, as Bidder, declares that this Bid is made in good faith, without fraud or collusion with any person or persons bidding on the same Contract; that this Bidder has carefully read and examined the bid documents, including City Nondiscrimination requirements and Declaration of Compliance Form, Living Wage requirements and Declaration of Compliance Form, Prevailing Wage requirements and Declaration of Compliance Form, Vendor Conflict of Interest Form, Notice of Pre-Bid Conference, Instructions to Bidders, Bid, Bid Forms, Contract, Bond Forms, General Conditions, Standard Specifications, Detailed Specifications, all Addenda, and the Plans (if applicable) and understands them. The Bidder declares that it conducted a full investigation at the site and of the work proposed and is fully informed as to the nature of the work and the conditions relating to the work's performance. The Bidder also declares that it has extensive experience in successfully completing projects similar to this one.

The Bidder acknowledges that it has not received or relied upon any representations or warrants of any nature whatsoever from the City of Ann Arbor, its agents or employees, and that this Bid is based solely upon the Bidder's own independent business judgment.

The undersigned proposes to perform all work shown on the plans or described in the bid documents, including any addenda issued, and to furnish all necessary machinery, tools, apparatus, and other means of construction to do all the work, furnish all the materials, and complete the work in strict accordance with all terms of the Contract of which this Bid is one part.

In accordance with these bid documents, and Addenda numbered 1, the undersigned, as Bidder, proposes to perform at the sites in and/or around Ann Arbor, Michigan, all the work included herein for the amounts set forth in the Bid Forms.

The Bidder declares that it has become fully familiar with the liquidated damage clauses for completion times and for compliance with City Code Chapter 112, understands and agrees that the liquidated damages are for the non-quantifiable aspects of non-compliance and do not cover actual damages that may be shown and agrees that if awarded the Contract, all liquidated damage clauses form part of the Contract.

The Bidder declares that it has become fully familiar with the provisions of Chapter 14, Section 1:320 (Prevailing wages) and Chapter 23 (Living Wage) of the Code of the City of Ann Arbor and that it understands and agrees to comply, to the extent applicable to employees providing services to the City under this Contract, with the wage and reporting requirements stated in the City Code provisions cited. Bidder certifies that the statements contained in the City Prevailing Wage and Living Wage Declaration of Compliance Forms are true and correct. Bidder further agrees that the cited provisions of Chapter 14 and Chapter 23 form a part of this Contract.

The Bidder declares that it has become familiar with the City Conflict of Interest Disclosure Form and certifies that the statement contained therein is true and correct.

The Bidder encloses a certified check or Bid Bond in the amount of 5% of the total of the Bid Price. The Bidder agrees both to contract for the work and to furnish the necessary Bonds and insurance documentation within 10 days after being notified of the acceptance of the Bid.

If this Bid is accepted by the City and the Bidder fails to contract and furnish the required Bonds and insurance documentation within 10 days after being notified of the acceptance of this Bid, then the Bidder shall be considered to have abandoned the Contract and the certified check or Bid Bond accompanying this Bid shall become due and payable to the City.

If the Bidder enters into the Contract in accordance with this Bid, or if this Bid is rejected, then the accompanying check or Bid Bond shall be returned to the Bidder.

In submitting this Bid, it is understood that the right is reserved by the City to accept any Bid, to reject any or all Bids, to waive irregularities and/or informalities in any Bid, and to make the award in any manner the City believes to be in its best interest.

SIGNED THIS 2 DAY OF September, 2021.

Hoffman Bros Inc
Bidder's Name

[Signature]
Authorized Signature of Bidder

8574 Verona Rd
Official Address

Bill Rizon
(Print Name of Signer Above)

(269) 965 1207
Telephone Number

estahley@hoffmanbrosinc.com
Email Address for Award Notice

LEGAL STATUS OF BIDDER

(The Bidder shall fill out the appropriate form and strike out the other three.)

Bidder declares that it is:

* A corporation organized and doing business under the laws of the State of Michigan, for whom Hoffman Bros Inc, bearing the office title of _____, whose signature is affixed to this Bid, is authorized to execute contracts.

NOTE: If not incorporated in Michigan, please attach the corporation's Certificate of Authority

~~• A limited liability company doing business under the laws of the State of _____, whom _____ bearing the title of _____ whose signature is affixed to this proposal, is authorized to execute contract on behalf of the LLC.~~

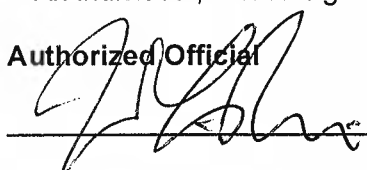
~~* A partnership, organized under the laws of the state of _____ and filed in the county of _____, whose members are (list all members and the street and mailing address of each) (attach separate sheet if necessary):~~

~~_____

_____~~

* An individual, whose signature with address, is affixed to this Bid: _____ (initial here)

Authorized Official



Date September 2, 2021

(Print) Name Bill Rizer Title Secretary

Company: Hoffman Bros Inc

Address: 8574 Verona Rd Battle Creek MI 49014

Contact Phone 269 965 1207 Fax 269 965 6701

Email brizer@hoffmanbrosmi.com

BID FORM

Company: Hoffman Bros Inc

Project: Schoolgirls Glen Culvert Replacement

File # 2020-026 Bid # 4689

<u>Item</u>	<u>Description</u>	<u>Unit</u>	<u>Estimated Quantity</u>	<u>Unit Price</u>	<u>Total Price</u>
1	Project Supervision, Max. \$ 10,000	LS	1	\$ <u>10,000.⁰⁰</u>	\$ <u>10,000.⁰⁰</u>
2	General Conditions (MAX \$20,000)	LS	1	\$ <u>20,000.⁰⁰</u>	\$ <u>20,000.⁰⁰</u>
3	Certified Payroll Compliance and Reporting	LS	1	\$ <u>500.⁰⁰</u>	\$ <u>500.⁰⁰</u>
4	Allowance for Unforeseen Site Conditions	DLR	10000	\$ <u>1.00</u>	\$ <u>10,000.00</u>
5	Preconstruction Audio-Visual Documentation (\$2,500 Max)	LS	1	\$ <u>2,500.⁰⁰</u>	\$ <u>2,500.⁰⁰</u>
6	Plastic Drum, High Intensity, Lighted, Furn	EA	20	\$ <u>30.⁰⁰</u>	\$ <u>600.⁰⁰</u>
7	Plastic Drum, High Intensity, Lighted, Oper	EA	20	\$ <u>.01</u>	\$ <u>.20</u>
8	Barricade, Type III, High Intensity, Lighted, Furn	EA	6	\$ <u>70.⁰⁰</u>	\$ <u>420.⁰⁰</u>
9	Barricade, Type III, High Intensity, Lighted Oper	EA	6	\$ <u>.01</u>	\$ <u>.06</u>
10	Sign, Type B, Temp, Prismatic, Furn	SFT	120	\$ <u>4.⁰⁰</u>	\$ <u>480.⁰⁰</u>
11	Sign, Type B, Temp, Prismatic, Oper	SFT	120	\$ <u>.01</u>	\$ <u>1.20</u>
12	Minor Traf Devices, Modified	LS	1	\$ <u>4,323.⁰⁰</u>	\$ <u>4,323.⁰⁰</u>
13	Pedestrian Type II Barricade, Temp	EA	3	\$ <u>90.⁰⁰</u>	\$ <u>270.⁰⁰</u>
14	Erosion Control, Silt Fence	FT	200	\$ <u>4.36</u>	\$ <u>872.⁰⁰</u>
15	Erosion Control, Check Dam, Stone	FT	30	\$ <u>43.20</u>	\$ <u>1,296.⁰⁰</u>
16	Mulch Blanket, Hig Velocity	SYD	70	\$ <u>6.⁵⁰</u>	\$ <u>455.⁰⁰</u>
17	Seeding, Fescue Lawn Mixture	LB	3	\$ <u>90.⁰⁰</u>	\$ <u>270.⁰⁰</u>
18	Water, Sodding/Seeding	UNITS	0.6	\$ <u>246.⁰⁰</u>	\$ <u>147.⁶⁰</u>
19	Tree, Rem, 6 inch to 18 inch	EA	2	\$ <u>540.⁰⁰</u>	\$ <u>1,080.⁰⁰</u>
20	Clearing	ACRE	0.1	\$ <u>33,000.⁰⁰</u>	\$ <u>3,300.⁰⁰</u>
21	Structures, Rem	LS	1	\$ <u>5,087.⁰⁰</u>	\$ <u>5,087.⁰⁰</u>
22	Culv, Rem, 24 inch to 48 inch	EA	2	\$ <u>810.⁰⁰</u>	\$ <u>1,620.⁰⁰</u>
23	Culv, Precast Conc Box, 8 foot x 3 foot, Modified	FT	30	\$ <u>4,180.⁰⁰</u>	\$ <u>125,400.⁰⁰</u>
24	Subgrade Undercutting, Modified	CYD	160	\$ <u>78.⁵⁰</u>	\$ <u>12,560.⁰⁰</u>
25	Excavation, Earth	CYD	400	\$ <u>32.65</u>	\$ <u>13,060.⁰⁰</u>
26	Excavation, Channel	CYD	70	\$ <u>56.⁰⁰</u>	\$ <u>3,920.⁰⁰</u>

TOTAL THIS PAGE (BF-1)
(Also to be entered on Page BF-2)

\$ 218,162.⁰⁶

BID FORM

Company: Hoffman Bros Inc

Project: Schoolgirls Glen Culvert Replacement

File # 2020-026 Bid # 4689

<u>Item</u>	<u>Description</u>	<u>Unit</u>	<u>Estimated Quantity</u>	<u>Unit Price</u>	<u>Total Price</u>
27	Backfill Structure, CIP	CYD	160	\$ <u>66.75</u>	\$ <u>10,680.00</u>
28	** item not used **			\$ <u>0</u>	\$ <u>0</u>
29	Subbase, CIP	CYD	190	\$ <u>68.60</u>	\$ <u>13,034.00</u>
30	Culv Bedding, Box Culv	CYD	15	\$ <u>182.00</u>	\$ <u>2,730.00</u>
31	Aggregate Surface Cse, 8 inch	SYD	150	\$ <u>20.00</u>	\$ <u>3,000.00</u>
32	Rip Rap, Plain	SYD	30	\$ <u>85.70</u>	\$ <u>2,571.00</u>
33	Plunge Pool	EA	3	\$ <u>9,875.00</u>	\$ <u>29,625.00</u>
34	Cascading Rock Channel	LS	1	\$ <u>30,570.00</u>	\$ <u>30,570.00</u>
35	Armored Spillway	FT	12	\$ <u>647.20</u>	\$ <u>7,706.40</u>
36	Weir Stabilization	LS	1	\$ <u>4,364.00</u>	\$ <u>4,364.00</u>
37	Project Clean-Up and Restoration, Special	LS	1	\$ <u>5,322.00</u>	\$ <u>5,322.00</u>
38	Rip Rap, Plain [Contingency]	Syd	100	\$ <u>63.75</u>	\$ <u>6,375.00</u>
39	Topsoil Surface, Furn, 4 inch [Contingency]	Syd	100	\$ <u>7.47</u>	\$ <u>747.00</u>
40	Arboretum Plantings, Reimbursement [Allowance]	DLR	5000	\$ <u>1.00</u>	\$ <u>5,000.00</u>
TOTAL THIS PAGE (BF-2)				\$	<u>121,724.40</u>
TOTAL FROM PAGE BF-1				\$	<u>218,162.06</u>
TOTAL BASE BID				\$	<u>339,886.46</u>

BID FORM

Section 2 – Material, Equipment and Environmental Alternates

The Base Bid proposal price shall include materials and equipment selected from the designated items and manufacturers listed in the bidding documents. This is done to establish uniformity in bidding and to establish standards of quality for the items named.

If the Contractor wishes to quote alternate items for consideration by the City, it may do so under this Section. A complete description of the item and the proposed price differential must be provided. Unless approved at the time of award, substitutions where items are specifically named will be considered only as a negotiated change in Contract Sum.

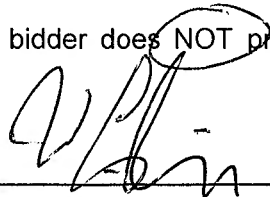
If an environmental alternative is bid the City strongly encourages bidders to provide recent examples of product testing and previous successful use for the City to properly evaluate the environmental alternative. Testing data from independent accredited organizations are strongly preferred.

<u>Item Number</u>	<u>Description</u>	<u>Add/Deduct Amount</u>
--------------------	--------------------	--------------------------

If the Bidder does not suggest any material or equipment alternate, the Bidder **MUST** complete the following statement:

For the work outlined in this request for bid, the bidder does **NOT** propose any material or equipment alternate under the Contract.

Signature of Authorized Representative of Bidder



Date

Sept 2, 2021

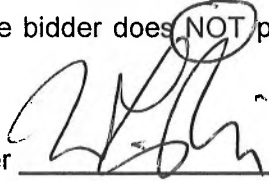
BID FORM

Section 3 - Time Alternate

If the Bidder takes exception to the time stipulated in Article III of the Contract, Time of Completion, page C-2, it is requested to stipulate below its proposed time for performance of the work. Consideration will be given to time in evaluating bids.

If the Bidder does not suggest any time alternate, the Bidder **MUST** complete the following statement:

For the work outlined in this request for bid, the bidder does **NOT** propose any time alternate under the Contract.

Signature of Authorized Representative of Bidder  Date Sept 2, 2021

BID FORM

Section 4 - Major Subcontractors

For purposes of this Contract, a Subcontractor is anyone (other than the Contractor) who performs work (other than or in addition to the furnishing of materials, plans or equipment) at or about the construction site, directly or indirectly for or on behalf of the Contractor (and whether or not in privity of Contract with the Contractor), but shall not include any individual who furnishes merely the individual's own personal labor or services.

Contractor agrees that all subcontracts entered into by the Contractor shall contain similar wage provision to Section 4 of the General Conditions covering subcontractor's employees who perform work on this contract.

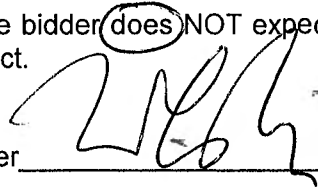
For the work outlined in these documents the Bidder expects to engage the following major subcontractors to perform the work identified:

<u>Subcontractor (Name and Address)</u>	<u>Work</u>	<u>Amount</u>
Clearing (TBD)	Tree Rem.	(TBD)

If the Bidder does not expect to engage any major subcontractor, the Bidder **MUST** complete the following statement:

For the work outlined in this request for bid, the bidder does NOT expect to engage any major subcontractor to perform work under the Contract.

Signature of Authorized Representative of Bidder



Date 9/2/2021

BID FORM

Section 5 – References

Include a minimum of 3 references from similar projects completed within the past 7 years.

[Refer also to Instructions to Bidders for additional requirements, if any]

1) Craig of Lakes \$860,000.00 6/30/21
Project Name Cost Date Constructed

Steve Roznowski (Spicer Group) (734) 823-3308
Contact Name Phone Number

2) W&S Storm Water Outlet \$787,547.00 3/31/21
Project Name Cost Date Constructed
Erosion Repair

Tom Walterhouse (UofM) (734) 662-1496
Contact Name Phone Number

3) Miller Rd Culvert \$755,000.00 2021
Project Name Cost Date Constructed

Alec Malvetis (517) 282-1356
Contact Name Phone Number

BID FORM

Section 6 – Contractor Information and Responsible Contractor Criteria

Backup documentation may be requested at the sole discretion of the City to validate all of the responses provided herein by bidders. False statements by bidders to any of the criteria provided herein will result in the bid being considered non-responsive and will not be considered for award.

Failure to provide responses to all questions may result in being deemed non-responsive.

Attach additional pages as needed if space below is insufficient.

Pursuant to Sec 1:312(20) of the City Code which sets forth requirements of a responsible bidder, Bidder is required to submit the following:

1. Organization Name: Hoffman Bros Inc

Social Security or Federal Employer I.D. #: 382051611

Address: 8574 Verona Rd

City: Battle Creek State: MI Zip: 49014

Type of Organization (circle one below):

Individual Partnership Corporation Joint Venture Other

If "Other" please provide details on the organization:

Year organization established: 1946

2. Current owners/principals/members/managing members/partners of the organization:
Brian Hoffman - President, Jesse Pero - VP, Tom Rizer - VP
Dan Eriksson - Treasure, Bill Rizer - Secretary

3. Assumed Names, "doing business as" d/b/a, and/or former organization names(s), if applicable: _____

Explanation of any business name changes:

4. If applicable, please provide a list of all bidder's litigation and arbitrations currently pending and within the past five years, including an explanation of each (parties, court/forum, legal claims, damages sought, and resolution).

N/A

5. Qualifications of management and supervisory personnel to be assigned by the bidder:

Project Manager Eric Stahley Supervisor (TBD)

6. List the state and local licenses and license numbers held by the bidder:

2 Licensed PE

7. Will all subcontractors, employees and other individuals working on the construction project maintain current applicable licenses required by law for all licensed occupations and professions?

Yes

No

8. Will contractors, subcontractors, employees, and other individuals working on the construction project be misclassified by bidder as independent contractors in violation of state or federal law?

Yes

No

9. Submit a statement as to what percentage of your work force resides within the City of Ann Arbor, and what percentage resides in Washtenaw County, Michigan, and the same information for any major subcontractors.

No Residents Reside in Washtenaw County

10. Submit documentation as to bidder's employee pay rates (e.g., certified payroll without SSN or personal identifying information, or chart of job titles and pay rates, or other evidence).

11. State whether bidder provides health insurance, pension or other retirement benefits, paid leave (vacation, personal time, sick leave, etc), or other benefits to its employees, and if so, state whether each benefit is provided directly to employees, by payments or contributions to a third-party administered plan, in cash (e.g., fringe benefit portion of prevailing wages), or other manner.

SEE Attachment

12. State whether bidder is an equal opportunity employer and does not discriminate in its hiring on the basis of race, sex, pregnancy, age, religion, national origin, marital status, sexual orientation or gender identity, height, weight, or disability.

Yes

No

13. State whether bidder has Equal Employment Opportunity Programs for minorities, women, veterans, returning citizens, and small businesses, and if so, submit supporting documentation or other evidence of such program(s).

SEE Attachment

14. Has bidder had any violations of state, federal, or local laws or regulations, including OSHA or MIOSHA violations, state or federal prevailing wage laws, wage and hour laws, worker's compensation or unemployment compensation laws, rules or regulations, issued to or against the bidder within the past five years?

Yes

No

If you answered "yes" to the question above, for each violation provide an explanation of the nature of the violation, the agency involved, a violation or reference number, any other individual(s) or party(ies) involved, and the status or outcome and resolution.

15. Does bidder have an existing Fitness for Duty Program (drugs and alcohol testing) of each employee working on the proposed jobsite?

Yes

No

If you answered "Yes", please submit documentation of the Fitness for Duty Program and what it entails.

16. Submit documents or evidence of any debarment by any federal, state or local governmental unit and/or findings of non-responsibility or non-compliance with respect to any public or private construction project performed by the bidder.

17. Proof of insurance, including certificates of insurance, confirming existence and amount of coverage for liability, property damage, workers compensation, and any other insurances required by the proposed contract documents.

18. Does bidder have an on-going MIOSHA-approved safety-training program for employees to be used on the proposed job site?

Yes

No

If bidder answered "yes" to the question above, submit documentation of your safety-training program.

19. Does bidder have evidence of worker's compensation Experience Modification Rating ("EMR")?

Yes

No

EMR = 0.97

20. Will bidder use masters, journeypersons and apprentices on the project?

Yes

No

If bidder answered "yes" to the question above, provide the ratio of masters and journeypersons to apprentices for this project.

Ratio: _____

If bidder answered "no" to the question above, submit documentation regarding the qualifications of each worker who may or will be assigned on the project.

If, yes, Ratio = _____

21. Can bidder provide documentation that it participates in a Registered Apprenticeship Program (RAP) that is registered with the United States Department of Labor Office of Apprenticeship or by a State Apprenticeship Agency recognized by the Office of Apprenticeship?

Yes

No

If bidder answered "yes" to the question above, please submit a copy of the program document(s) and evidence of its registration.

If bidder answered "no" to the question above, please provide details on how you assess the skills and qualifications of any employees who do not have master or journeyperson certification or status, or are not participants in a Registered Apprenticeship Program.

22. Will bidder comply with all applicable state and federal laws and visa requirements regarding the hiring of non-US citizens, and disclosure of any work visas sought or obtained by the bidder, any of the bidder's subcontractors, or any of the bidder's employees or independent contractors, in order to perform any portion of the project?

Yes

No

23. Submit evidence that bidder has financial resources to start up and follow through on the project and to respond to damages in case of default as shown by written verification of bonding capacity equal to or exceeding the amount of the bidders scope of work on the project. The written verification must be submitted by a licensed surety company rated B+ or better in the current A.M. Best Guide and qualified to do business within the State of Michigan, and the same audited financial information for any subcontractor estimated to be paid more than \$100,000 related to any portion of the project.

24. Submit evidence of a quality assurance program used by the bidder and the results of same on the bidder's previous projects.

THE AMERICAN INSTITUTE OF ARCHITECTS



AIA Document A310

Bid Bond

KNOW ALL MEN BY THESE PRESENTS, that we

Hoffman Bros. Inc.
8574 Verona Road, Battle Creek, MI 49014

as Principal, hereinafter called Principal, and

Liberty Mutual Insurance Company
175 Berkeley Street, Boston, MA 02116

a corporation duly organized under the laws of the State of **Massachusetts**
as Surety, hereinafter called Surety, are held and firmly bound unto

City of Ann Arbor
301 East Huron Street, Ann Arbor, MI 48104

as Obligee, hereinafter called Obligee, in the sum of **Five Percent of Accompanying Bid**

Dollars (5% of Bid

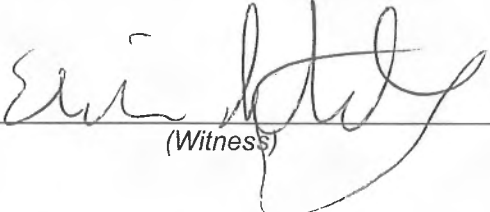
for the payment of which sum well and truly to be made, the said Principal and the said Surety, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.


WHEREAS, the Principal has submitted a bid for (Here insert full name, address and description of project)


School Girls Glen Culvert Replacement - Nichols Drive

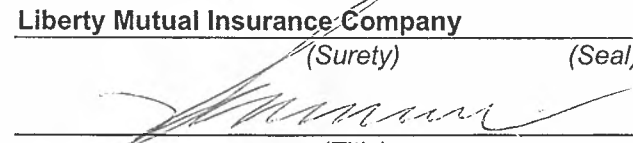
NOW, THEREFORE, if the Obligee shall accept the bid of the Principal and the Principal shall enter into a Contract with the Obligee in accordance with the terms of such bid, and give such bond or bonds as may be specified in the bidding or Contract Documents with good and sufficient surety for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof, or in the event of the failure of the Principal to enter such Contract and give such bond or bonds, if the Principal shall pay to the Obligee the difference not to exceed the penalty hereof between the amount specified in said bid and such larger amount for which the Obligee may in good faith contract with another party to perform the Work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect.

Signed and sealed this 2nd day of September, 2021.


(Witness)

Hoffman Bros. Inc.

(Principal) (Seal)
Secretary
(Title)


(Witness)

Liberty Mutual Insurance Company
(Surety) (Seal)

(Title)
Nicholas Ashburn, Attorney in Fact



This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

Certificate No: 8198086-013068

POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS: That The Ohio Casualty Insurance Company is a corporation duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Anne Barick; Holly Nichols; Jason Rogers; Mark Madden; Michael D. Lechner; Nicholas Ashburn; Paul M. Hurley; Richard S. McGregor; Robert D. Heuer

all of the city of Rochester Hills state of MI each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 30th day of November, 2018.



Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

By: [Signature]

David M. Carey, Assistant Secretary

State of PENNSYLVANIA
County of MONTGOMERY ss

On this 30th day of November, 2018 before me personally appeared David M. Carey, who acknowledged himself to be the Assistant Secretary of Liberty Mutual Insurance Company, The Ohio Casualty Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute 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 have hereunto subscribed my name and affixed my notarial seal at King of Prussia, Pennsylvania, on the day and year first above written.



Commonwealth of Pennsylvania - Notary Seal
Teresa Pastella, Notary Public
Montgomery County
My commission expires March 28, 2025
Commission number 1126044
Member, Pennsylvania Association of Notaries

By: [Signature]
Teresa Pastella, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:

ARTICLE IV - OFFICERS: Section 12. Power of Attorney.

Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

ARTICLE XIII - Execution of Contracts: Section 5. Surety Bonds and Undertakings.

Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

Certificate of Designation - The President of the Company, acting pursuant to the Bylaws of the Company, authorizes David M. Carey, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization - By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, Renee C. Llewellyn, the undersigned, Assistant Secretary, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, 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 2nd day of September, 2021.

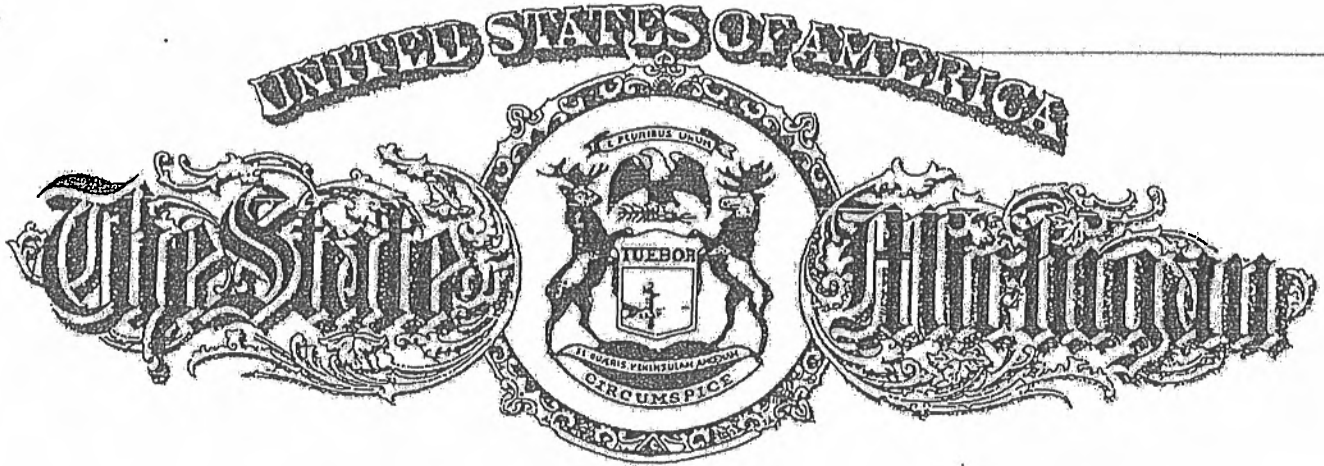


By: [Signature]

Renee C. Llewellyn, Assistant Secretary

Not valid for mortgage, note, loan, letter of credit, currency rate, interest rate or residual value guarantees.

For bond and/or Power of Attorney (POA) verification inquiries, please call 610-832-8240 or email HOSUR@libertymutual.com.



Department of Licensing and Regulatory Affairs

Lansing, Michigan

This is to Certify That

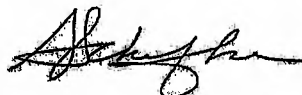
HOFFMAN BROS., INC.

was validly incorporated on July 15, 1974, as a Michigan profit corporation, and said corporation is validly in existence under the laws of this state.

This certificate is issued pursuant to the provisions of 1972 PA 284, as amended, to attest to the fact that the corporation is in good standing in Michigan as of this date and is duly authorized to transact business and for no other purpose.

This certificate is in due form, made by me as the proper officer, and is entitled to have full faith and credit given it in every court and office within the United States.

In testimony whereof, I have hereunto set my hand, in the City of Lansing, this 3rd day of January, 2012.

 Director

Bureau of Commercial Services



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

3/15/2021

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).


PRODUCER Guy Hurley, LLC 989 E. South Blvd. Rochester Hills MI 48307	CONTACT NAME: Christine Phillips	
	PHONE (A/C, No. Ext): (248) 519-1400	FAX (A/C, No): (248) 519-1401
	E-MAIL ADDRESS: cphillips@ghbh.com	
	INSURER(S) AFFORDING COVERAGE	NAIC #
	INSURER A: Travelers Property Cas Co A++ XV	25674
	INSURER B: Valley Forge Insurance Co A XV	20508
	INSURER C: Zurich American Ins Co A+ XV	16535
	INSURER D:	
	INSURER E:	
	INSURER F:	

COVERAGES CERTIFICATE NUMBER: 21-22 Master REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
C	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY			GLO3703233	4/1/2021	4/1/2022	EACH OCCURRENCE \$ 1,000,000
	<input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 300,000
	<input checked="" type="checkbox"/> CONTRACTUAL LIABILITY						MED EXP (Any one person) \$ 10,000
	<input checked="" type="checkbox"/> XCU INCLUDED						PERSONAL & ADV INJURY \$ 1,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE \$ 2,000,000
	<input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PROJECT <input type="checkbox"/> LOC						PRODUCTS - COMP/OP AGG \$ 2,000,000
	OTHER:						Employee Benefits \$ 1,000,000
C	AUTOMOBILE LIABILITY			BAP3703234	4/1/2021	4/1/2022	COMBINED SINGLE LIMIT (Ea accident) \$ 2,000,000
	<input checked="" type="checkbox"/> ANY AUTO						BODILY INJURY (Per person) \$
	<input type="checkbox"/> ALL OWNED AUTOS	<input type="checkbox"/> SCHEDULED AUTOS					BODILY INJURY (Per accident) \$
	<input checked="" type="checkbox"/> HIRED AUTOS	<input checked="" type="checkbox"/> NON-OWNED AUTOS					PROPERTY DAMAGE (Per accident) \$
							PIP-Basic \$
A	<input checked="" type="checkbox"/> UMBRELLA LIAB			ZUP51M2315A21NF	4/1/2021	4/1/2022	EACH OCCURRENCE \$ 10,000,000
	<input type="checkbox"/> EXCESS LIAB	<input checked="" type="checkbox"/> OCCUR					AGGREGATE \$ 10,000,000
	<input type="checkbox"/> DED	<input type="checkbox"/> CLAIMS-MADE					\$
	RETENTION \$						
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY			WC3703232	4/1/2021	4/1/2022	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH)	<input checked="" type="checkbox"/> Y <input checked="" type="checkbox"/> N	N/A				E.L. EACH ACCIDENT \$ 1,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE \$ 1,000,000
							E.L. DISEASE - POLICY LIMIT \$ 1,000,000
B	INLAND MARINE			6016922534	4/1/2021	4/1/2022	LEASED/RENTED EQUIP \$500,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER	CANCELLATION
	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE
	R McGregor/PHILLI 

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8574 VERONA ROAD • BATTLE CREEK, MICHIGAN 49014
PHONE: (269) 965-1207 • FAX: (269) 965-6701
WWW.HOFFMANBROSINC.COM
"AN EQUAL OPPORTUNITY EMPLOYER"

February 18, 2020

To whom it may concern:

It is the policy of Hoffman Bros., Inc. to ensure applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. This shall include employment, up-grading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rate of pay or other forms of compensation; and selection of training including apprenticeships, preapprenticeships and/or on-the-job training.

The organization has designated Edward E. Davids our Equal Employment Opportunity Officer.

We are requesting your assistance and cooperation in meeting the goals and requirements and will be contacting you with additional specific requests as they arise.

Sincerely yours,
HOFFMAN BROS., INC.

Edward E. Davids
Secretary





Liberty Mutual Surety

Phil Lazarski, AFSB

Bond Manager
2000 Westwood Drive
Wausau, WI 54401
Phillip.Lazarski@LibertyMutual.com
Telephone: 715-261-5711

May 24, 2021

Re: Hoffman Brothers, Inc.
Bonding Letter

Surety: Liberty Mutual Insurance Company

To Whom It May Concern:

Hoffman Brothers, Inc. is a highly regarded and valued client of Liberty Mutual Insurance Company. We have provided surety support for Hoffman Brothers, Inc. since 1979. Liberty Mutual has extended a surety line of credit to Hoffman Brothers, Inc. in the past and would not hesitate to do so in the future. In order to handle their daily bond needs we have supplied Hoffman Brothers with a surety line of credit for single projects of \$50,000,000 and an aggregate of \$100,000,000 to handle their typical bond needs. As always, Liberty Mutual Insurance Company reserves the right to perform normal underwriting at the time of any bond request, including without limitation to, prior review and approval of relevant contract documents, bond forms, and project financing.

Their bonding agent is Guy Hurley located in Rochester Hills, MI.

This letter is not an assumption of liability nor is it a bond. Any arrangement for bonds is a matter between Hoffman Brothers, Inc. and Liberty Mutual. We assume no liability to you or to third parties if for any reason we do not supply said bond or bonds.

Liberty Mutual Insurance Company is licensed to do business in all states and many international jurisdictions and has an A (Excellent) rating and a financial size category of XV in the A. M. Best's Insurance Guide.

Regards,

Phil Lazarski
Liberty Mutual Surety

Hoffman Brothers Inc

FMCSA

Combined Drug/Alcohol

Substance Abuse Policy

Effective Date: February 27, 2020

Section 1

Company Policy

Section 2

Supervisor Information

Section 3

Forms

Section 4

Records & Reports

Section 5

Resources & Regulations

Section 1

Company Policy

NOTE: In terms of DOT regulations, Section 1 constitutes a "condensed" version of the company's Substance Abuse Program. The entire plan, consisting of Sections 1 thru 5 and referenced DOT regulations, can be obtained by contacting the company's Designated Employer Representative (DER) listed in Section 1, Contacts.

Page Contents:

4	Notice to Employees
5-6	CONTACTS:
7	A INTRODUCTION AND GENERAL REQUIREMENTS
8	B MATERIALS REQUIRED BY DOT REGULATIONS
8	B-1 DESIGNATED EMPLOYER REPRESENTATIVE
8	B-2 EMPLOYEES SUBJECT TO THIS POLICY
8	B-3 REQUIRED COMPLIANCE PERIODS
9-10	B-4 PROHIBITED CONDUCT
10-14	B-5 TESTS REQUIRED (pre-employment, post-accident, random, reasonable suspicion, return-to-duty, follow-up)
14-18	B-6 TESTING PROCEDURES
18	B-7 REQUIREMENT TO SUBMIT TO TESTING
18-19	B-8 REFUSAL TO SUBMIT TO TESTING
19-20	B-9 CONSEQUENCES OF VIOLATING THIS POLICY
20	B-10 ALCOHOL CONCENTRATION OF 0.02 - 0.039
20	B-11 EFFECTS OF ALCOHOL and CONTROLLED SUBSTANCE USE
20-21	C OPTIONAL PROVISIONS (stand-down, self-referral)
21	D CERTIFICATE OF RECEIPT REQUIREMENT
	Appendix A - Training Materials/Employees
22	A1 Alcohol
23	A2 Marijuana
24	A3 Cocaine
25	A4 Amphetamine/Methamphetamine
26	A5 Opioids (Morphine/Codeine/Heroin/Other)
27	A6 PCP (Phencyclidine)
28-32	Appendix B – Supplemental Definitions
33	Appendix C – Specimen Collection Synopsis
35	Clearinghouse Educational Materials/Receipt
37	Certificate of Receipt for Employee's Copy of this Policy
39	Post-Accident Test Criteria (Flow Chart)
Back Cover	DS+Model Program Agreement

To all Employees:

The Federal Department of Transportation (DOT) has issued regulations (49 CFR 40) regarding Controlled Substances and Alcohol Use and Testing. Because the Company is required to comply with these regulations and with DOT agency regulations (including FMCSA's 49 CFR 382), we must issue a policy prohibiting substance abuse by our safety-sensitive employees.

Alcohol consumption by our safety-sensitive employees is prohibited while performing, and for four (4) hours prior to performing safety-sensitive functions; and for eight (8) hours after an accident unless it has been determined by a Company official that a post-accident alcohol test is not required.

Likewise, manufacturing, selling, buying, soliciting to buy or sell, transporting, using or possessing illegal drugs (including a drug prescribed for another person) is prohibited. For additional information about conduct prohibited by FMCSA, see Subpart B of 49 CFR 382 at FMCSA's website: www.fmcsa.dot.gov/rules-regulations/administration/fmcsr/fmcsrguidedetails.asp?regulation=382

The regulations are very specific regarding what The Company must do to comply. We have developed a policy and procedures that will apply to you based upon the job functions you perform. The entire plan (consisting of Sections 1 thru 5 of this model program and referenced DOT regulations) can be obtained by contacting the company's Designated Employer Representative (DER) listed in Section 1, Contacts.

We must conduct tests under certain specific situations to determine whether employees have used alcohol or drugs. The procedures and technology we will employ in this testing are specified in a Department of Transportation Regulation, Procedures for Transportation Workplace Drug and Alcohol Testing Program (49 CFR, Part 40). Internet users can access information about and/or changes to these regulations from the Drug Screens Plus website at: www.dsplus.com or the ODAPC (Office of Drug and Alcohol Policy and Compliance) website at: www.dot.gov/ost/dapc/documents.html?documents

A positive drug or alcohol test or a refusal to test or to submit a specimen for a drug or alcohol test (see 49 CFR 40.191 and 40.261) or other violation of 49 CFR 40 or DOT agency drug and alcohol regulations is grounds for discharge, solely at the option of the Company.

Each employee must read this policy and sign a statement certifying that he or she has received a copy. Refusal to sign for receipt of a copy of this policy is grounds for discharge, solely at the option of the Company.

Thank you for your cooperation in implementing these important safety regulations. If you have any questions regarding the DOT regulations or the Company's policies and procedures; please contact the Company's Designated Employer Representative (DER) listed on the following page.

Effective February 27, 2020 CONTACT:

Designated Employer Representative (DER) for drug and alcohol policy, procedure information, or for referral to a Substance Abuse Professional (SAP).

Lisa Smith
Hoffman Brothers Inc
8574 Verona Rd
Battle Creek MI 49014
Ph: 269-965-1207
Fax:
Email: lsmith@hoffmanbrosinc.com

Medical Review Officer (MRO)
Medical Review of Test Results

John Budnick, D.O., MRO-C
DRUG SCREENS PLUS (~~DS-A~~)
3625 Clyde Park SW, Suite B
Grand Rapids MI 49509
(800) 459-9012 ext 785

Specimen Collection Site
for Drug/Alcohol Testing.
Other site listings available.
See next page or below:

Multiple Sites

Locating a SAP or Collection Site
This office can assist you with arranging SAP evaluations and/or specimen collection sites throughout the U.S.

Jill Umfleet
DRUG SCREENS PLUS (~~DS-A~~)
3625 Clyde Park SW, Suite B
Grand Rapids MI 49509
(800) 459-9012 ext 784

Counseling/Treatment
Must be an entity other than the SAP who performed the evaluation.

Referral will be made to appropriate facility/service subsequent to SAP evaluation.

DHHS Certified Labs

Note: Primary lab may be used in any combination with Secondary Lab (e.g., Secondary lab used as Primary lab) and the combination may change from time to time or according to circumstances (e.g., a post-accident "cab pack" specifies one lab/air-carrier services, and pre-employment test specifies clinic with 2nd lab/courier service). Special Note: "HHS certifies each lab separately and on its own merits"...a split specimen can be sent to a 2nd lab "under the same corporate title" as the primary lab.

Primary: (i.e., split-testing)
MedTox Laboratories Inc
354 West County Road D
Saint Paul MN 55112

Secondary: (i.e., primary testing)
Quest Toxicology Network (QTN)
Quest Diagnostics
10101 Renner Blvd
Lenexa KS 66219

Substance Abuse Crisis Hotlines:

Alcoholics Anonymous	800-356-9996
Cocaine	800-COCAINE (262-2463)
Natl Institute on Drug Abuse	800-662-HELP (622-2255)

REGARDING: CONTACT:

**Additional Designated Employer
Representatives (DER)** for drug and alcohol
policy, procedure information, or for referral
to a Substance Abuse Professional (SAP).

Brian Hoffman
Hoffman Brothers Inc
8574 Verona Rd
Battle Creek MI 49014
Ph: 269-965-1207
Fax:
Email:
bhoffman@hoffmanbrosinc.com

ON-THE-JOB TRAINING (OJT) PROGRAM CONTRACTOR YEARLY TRAINING PLAN

INSTRUCTIONS: Refer to the OJT Program Instructions for MDOT Form 0181 to complete this form.

CONTRACTOR INFORMATION

CONTRACTOR NAME	ADDRESS		TELEPHONE NO.	
Hoffman Bros., Inc	8574 Verona Road, Battle Creek, MI 49014		(269) 965-1207	
CONTRACTOR OJT CONTACT	E-MAIL ADDRESS		TOTAL TRAINING ASSIGNMENTS	
Lisa A Smith	lsmith@hoffmanbrosmc.com		Year 2020 # of Slots 1	
CONTRACTOR EQUAL EMPLOYMENT OPPORTUNITY (EEO) OFFICER	CONTRACTOR VENDOR NO.			
Edward E Davids	00134			

TRAINEE INFORMATION

#	TRAINEE NAME	SOCIAL SECURITY NO. (last 4 numbers)	TRAINEE HIRE DATE	TRAINING PROGRAM	TRAINING PROGRAM START DATE	GENDER	ETHNICITY
1	Tiemey R Johnsen	1226	05/18/17	Union Plan Operating Engineers Local 324	04/02/18	F	Caucasion
2							
3							
4							
5							
6							
7							
8							
9							
10							

CONTRACTOR OJT CONTACT OR EEO OFFICER SIGNATURE (e-signature acceptable)

Lisa A Smith

Digitally signed by Lisa A Smith
DN: cn=Lisa A Smith, o=Hoffman Bros., Inc, ou=Payroll, email=lsmith@hoffmanbrosmc.com, c=US
Date: 2020.04.17 13:52:47 -0400

DATE

04/17/20

TRAINEE INFORMATION (continued)

	TRAINEE NAME	SOCIAL SECURITY NO. (last 4 numbers)	TRAINEE HIRE DATE	TRAINING PROGRAM	TRAINING PROGRAM START DATE	GENDER	ETHNICITY
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							

ATTACH ADDITIONAL SHEET IF MORE SPACE IS NEEDED

CONTRACTOR OUT CONTACT OR EEO OFFICER SIGNATURE (e-signature acceptable)

DATE

On the Job Training (OJT) Program Instructions for MDOT Form 0181

This form is completed by an OJT Program Contractor and lists all individuals (new or returning trainees) their firm proposes to place as a trainee to fulfill their required OJT Program training assignment(s) for the year. This form requires information from the Contractor's yearly Allocation Letter and therefore cannot be completed until the Contractor has received their Allocation Letter from MDOT identifying their OJT Program training assignment(s) for the year.

OR

This form is completed by a MDOT Prequalified Contractor who does not currently have OJT Program training assignment(s), but desires to participate by accepting and fulfilling a minimum of one OJT Program training assignment, and is subject to the requirements of MDOT's OJT Program.

MDOT's OJT Program Manual and materials are available at www.Michigan.gov/OJT.

CONTRACTOR INFORMATION Section

Contractor Name
The name of your construction firm.

Address
The business mailing address where your firm's OJT Contact receives mail.

Contractor OJT Contact
The name of the person within your firm responsible for OJT Program reporting and compliance. This person will be the primary contact for all OJT Program related items, including trainee approvals, Allocation Letter, etc.

E-mail Address
The current valid email address of your firm's OJT Contact where they can be reached for questions regarding the OJT Program.

Telephone No.
The current valid phone number of your firm's OJT Contact where they can be reached for questions regarding the OJT Program.

Contractor Equal Employment Opportunity (EEO) Officer
The name of your firm's Equal Employment Opportunity Officer.

Contractor Vendor No.
Your firm's MDOT Vendor Number.

Total Training Assignments Year
The calendar year this training plan is being submitted for.

Total Training Assignments # of Slots
The number of training slots assigned to your firm for the calendar year listed. Reference the Allocation Letter your firm received from MDOT. If you are uncertain of the number of training slots assigned to your firm, contact MDOT OBD.

TRAINEE INFORMATION Section

List all individuals (new or returning trainees) your firm proposes to place as trainee(s) to fulfill your firm's required OJT Program training assignment(s) for the year.

Trainee Name
The legal first and last name of the individual.

Social Security No. (last 4 numbers)
The last four numbers of the individual's social security number.

Trainee Hire Date
The first day the individual started working as an employee for your firm.

Training Program
The training program in which the individual is or will be enrolled in.

Training Program Start Date
The first day the individual started working towards completion of the identified training program classification listed on the form.

Gender
The gender of the individual.

Ethnicity
The ethnicity of the individual.

Contractor OJT Contact or EEO Officer Signature, Date
Your firm's OJT Contact or EEO Officer reviews the form for accuracy and completeness.
Sign and date.

FORM SUBMISSION

Submission of this form does not grant OJT Program approval for the listed individual(s). An individual should not be placed on a project prior to approval as an On-the-Job Trainee (using MDOT Form 0190).

Completed forms should include a Request for Trainee Approval (MDOT Form 0190) for each new individual and any previously approved trainee starting a different training program. A copy of each individual's training program should be attached to their MDOT Form 0190.

Submit completed forms and attachments no later than **April 30th** of each calendar year to:

MAIL: Michigan Department of Transportation

Office of Business Development
PO Box 30050
Lansing, Michigan 48909

E-MAIL: MDOT-OJT@Michigan.gov

MICHIGAN UNION CONTRACTORS GROUP

April 1, 2019 – May 31, 2024

HIGHWAY, BRIDGE AND AIRPORT AGREEMENT

INTERNATIONAL UNION OF OPERATING ENGINEERS

Local No. 324- AFL – CIO

500 Hulet Dr.
Bloomfield Twp., Michigan 48302

- (b) Employer's "Discretionary" classifications:
- (1) Foreman
 - (2) Asphalt Screed or Screw Operator
 - (3) Lowboy

CLASS I - WAGE AND FRINGE BENEFIT RATES
Effective first full payroll period on or after April 1, 2019

*Base Wage Per Hour	\$29.01
*Vacation & Holiday (15% Funded)	\$ 4.35
*Supplemental Vacation (Funded)	\$ 0.05
Pension (Funded)	\$12.95
Health Care (Funded)	\$ 8.40
Apprenticeship Fund	\$ 1.00
Retiree Benefit (Funded)	\$ 0.45
Labor Management Education Committee	\$ 0.16
IUOE National Training Fund	\$ 0.05
DC Plan	<u>\$ 1.00</u>
Total	\$57.42

Effective first full payroll period on or after June 1, 2019

MUCG Industry Advancement Fund	\$ 0.03
Road Labor Management Fund	\$ 0.05

*Taxable Income

***Any Fringe Benefit adjustment will be allocated by the Union from the negotiated increases first or come off the Base Rate. The Allocation between wages and fringe benefits may be adjusted 30 days before June 1st of each contract year.*

CLASS I - WAGE AND FRINGE BENEFIT RATES

Effective first full payroll period on or after June 1, 2019

*Base Wage Per Hour	\$1.25
*Vacation & Holiday (15% Funded)	per hour increase
*Supplemental Vacation (Funded)	to be allocated
Pension (Funded)	
Health Care (Funded)	
Apprenticeship Fund	
Retiree Benefit (Funded)	
Labor Management Education Committee	
IUOE National Training Fund	
DC Plan	
Gross Wage	

*Taxable Income

***Any Fringe Benefit adjustment will be allocated by the Union from the negotiated increases first or come off the Base Rate. The Allocation between wages and fringe benefits may be adjusted 30 days before June 1st of each contract year.*

CLASS I - WAGE AND FRINGE BENEFIT RATES

Effective first full payroll period on or after June 1, 2020

*Base Wage Per Hour	\$1.25
*Vacation & Holiday (15% Funded)	per hour increase
*Supplemental Vacation (Funded)	to be allocated
Pension (Funded)	
Health Care (Funded)	
Apprenticeship Fund	
Retiree Benefit (Funded)	
Labor Management Education Committee	
IUOE National Training Fund	
DC Plan	
Gross Wage	

Taxable Income

***Any Fringe Benefit adjustment will be allocated by the Union from the negotiated increases first or come off the Base Rate. The Allocation between wages and fringe benefits may be adjusted 30 days before June 1st of each contract year.*

CLASS I – WAGE AND FRINGE BENEFIT RATES

Effective first full payroll period on or after June 1, 2021

*Base Wage Per Hour	\$2.00
*Vacation & Holiday (15% Funded)	per
*Supplemental Vacation (funded)	hour
Pension (Funded)	increase
Health Care (Funded)	to
Apprenticeship Fund	be
Retiree Benefit (Funded)	allocated
Labor Management Education Committee	
IUOE National Training Fund	
DC Plan	

Gross Wage

* Taxable Income

***Any Fringe Benefit adjustment will be allocated by the Union from the negotiated increases first or come off the Base Rate. The Allocation between wages and fringe benefits may be adjusted 30 days before June 1st of each contract year.*

CLASS I – WAGE AND FRINGE BENEFIT RATES

Effective first full payroll period on or after June 1, 2022

*Base Wage Per Hour	\$2.00
*Vacation & Holiday (15% Funded)	per
*Supplemental Vacation (funded)	hour
Pension (Funded)	increase
Health Care (Funded)	to
Apprenticeship Fund	be
Retiree Benefit (Funded)	allocated
Labor Management Education Committee	
IUOE National Training Fund	
DC Plan	

Gross Wage

* Taxable Income

***Any Fringe Benefit adjustment will be allocated by the Union from the negotiated increases first or come off the Base Rate. The Allocation between wages and fringe benefits may be adjusted 30 days before June 1st of each contract year.*

CLASS I – WAGE AND FRINGE BENEFIT RATES

Effective first full payroll period on or after June 1, 2023

*Base Wage Per Hour	\$2.00
*Vacation & Holiday (15% Funded)	per
*Supplemental Vacation (funded)	hour
Pension (Funded)	increase
Health Care (Funded)	to
Apprenticeship Fund	be
Retiree Benefit (Funded)	allocated
Labor Management Education Committee	
IUOE National Training Fund	
DC Plan	

Gross Wage

* Taxable Income

***Any Fringe Benefit adjustment will be allocated by the Union from the negotiated increases first or come off the Base Rate. The Allocation between wages and fringe benefits may be adjusted 30 days before June 1st of each contract year.*

Air Compressors in Manifold with throttle valve
Asphalt Planer self-propelled
Asphalt Plant Engineer
Asphalt Transfer Machine (Shuttle Buggy)
Asphalt Screed or Screw Operator
Auto Grade or similar type machine
Backhoe on Farm Type Tractor 45 H.P. & over.
Ballast Regulator (R.R.)
Batch Plant (concrete - central mix)
Bituminous Mixer
Bituminous Paver (self-propelled)
Bituminous Plant Engineer
Blade Grader Operator
Bull Dozer
Caisson Drilling Machine
Cherry Picker--15 ton or over
Chip Spreader
Concrete Belt Placer (Formless)

Concrete Cure/Finish Machine Operator
Concrete Mixer 21 cu. ft. or over
Concrete Pump (Truck Mount)
Concrete Pump (3 inch and over)
Concrete/Asphalt Saw Operator-Power Driven (3 yrs. experience or more)
Conveyor Loader Operator (Euclid type)
Core Drilling Machine
Crane or Derrick with any attachment incl. clamshell, dragline, shovel, backhoe, etc.
Curb-Barrier Wall Machine CMI type
Directional Drill/Boring Machine Operator
Dredge Engineer
Dredge Operator
Drilling Machine on which the drill is an integral part
Earth Mover--rubber tired--(paddle wheel, 619, 631, TS-24 or similar type)
Earth Mover rubber tired--tandem (50 cents per hr. added for each bowl)
Elevating Grader Operator
End loader Operator (1½ yard capacity and over)
Excavator
Farm type tractor with attached pan
Finishing Machine Operator (Asphalt or Concrete)
Foreman/Operating Engineer
Fork Lift (10 ton or over)
P.C.C. Formless Paver
GPS or Electronic Grade on motorized equipment
Equipment Gradall and similar type machine Grader
Gravel Processing plant (portable)
Grooving Machine
Operator of Guard Rail Post Driver
Haul Units (off-highway)
Helicopter crew
Highlift Shovel--1-1 /2 cu. yd. or over
Hoisting Engineer
Horizontal Directional Drill
Hydraulic Boom Truck
Hydro demolition equipment (water blaster)
Loader--Self-propelled (Belt-Chain-Wheel) (Holland or similar type)
Locomotive and/or Dinkey Engine
Mechanic
Milling Machine

Mucking Machine
Panel Board Concrete Plant (central mix type)
Paver--Hetherington
Paver Micro Surface
Paver Operator- Concrete
Pile Driver--Skid or Crawler
Pump Operator (6" discharge or over, gas diesel, powered or generator of 300 amp or larger)
Road Paving Mixer
Rock Breaking Plant
Rock Crushing Plant (Portable)
Roller--Asphalt, Waterbound Macadam, Bituminous Macadam, Brick
Surface Roller with Dozer Blade
Root Rake, Tractor Mounted Sand Blaster Vacuum
Roto Mill
Shovel Operator
Self-Propelled or Tractor Drawn Scraper
Self-propelled Widener or Gravel distributing shoulder machine
Side Boom Tractor (type D-4 or equivalent or larger)
Stump Remover Tractor Mounted
Slip Form Paver
Slurry Machine (asphalt)
Surface Heater & Planer
Swinging Boom Truck (over 12-ton capacity)
Tilling Machine or (Roto Grader)
Tractor Operator
Tractor--Boom, Winch or Hoe Head
Tractor--Push
Tractor with Scoop
Tractor Mounted Spreader
Tree Mover
Tube Finisher (slip form paving)
Trench Machine (ladder or wheel type)
Tug Boat Operator
Tunnel Shield
Vacuum Machine/Truck Operator
Well Drilling Machine
Winch Truck with A Frame

**On bridge construction projects when a Class I Crane Operator is erecting

structural components as part of a composite crew with Structural Ironworkers, the Base Rate and Vacation and Holiday pay shall be at the Crane Operator rate as set forth in the current agreement between the Union and the Great Lakes Fabricators and Erectors Association.

CLASS II- WAGE AND FRINGE BENEFIT RATES
Effective first full payroll period on or after April 1, 2019

*Base Wage Per Hour	\$23.15
*Vacation & Holiday (15% Funded)	\$ 3.48
*Supplemental Vacation (Funded)	\$ 0.05
Pension (Funded)	\$12.95
Health Care (Funded)	\$ 8.40
Apprenticeship Fund	\$ 1.00
Retiree Benefit (Funded)	\$ 0.45
Labor Management Education Committee	\$ 0.16
IUOE National Training Fund	\$ 0.05
DC Plan	<u>\$ 1.00</u>
	\$50.69

Effective first full payroll period on or after June 1, 2019

MUCG Industry Advancement Fund	<u>\$0.03</u>
Road Labor Management Fund	<u>\$0.05</u>

*Taxable Income

***Any Fringe Benefit adjustment will be allocated by the Union from the negotiated increases first or come off the Base Rate. The Allocation between wages and fringe benefits may be adjusted 30 days before June 1st of each contract year.*

CLASS II-- WAGE AND FRINGE BENEFIT RATES
Effective first full payroll period on or after June 1, 2019

*Base Wage Per Hour	\$1.25
*Vacation & Holiday (15% Funded)	per hour increase
*Supplemental Vacation (Funded)	to be allocated
Pension (Funded)	
Health Care (Funded)	
Apprenticeship Fund	
Retiree Benefit (Funded)	
Labor Management Education Committee	
IUOE National Training Fund	
DC Plan	
Gross Wage	

*Taxable Income

***Any Fringe Benefit adjustment will be allocated by the Union from the negotiated increases first or come off the Base Rate. The Allocation between wages and fringe benefits may be adjusted 30 days before June 1st of each contract year.*

CLASS II - WAGE AND FRINGE BENEFIT RATES
Effective first full payroll period on or after June 1, 2020

*Base Wage Per Hour	\$1.25
*Vacation & Holiday (15% Funded)	per hour increase
*Supplemental Vacation (Funded)	to be allocated
Pension (Funded)	
Health Care (Funded)	
Apprenticeship Fund	
Retiree Benefit (Funded)	
Labor Management Education Committee	
IUOE National Training Fund	
DC Plan	
Gross Wage	

*Taxable Income

***Any Fringe Benefit adjustment will be allocated by the Union from the negotiated increases first or come off the Base Rate. The Allocation between wages and fringe benefits may be adjusted 30 days before June 1st of each contract year.*

CLASS II - WAGE AND FRINGE BENEFIT RATES
Effective first full payroll period on or after June 1, 2021

*Base Wage Per Hour	\$2.00
*Vacation & Holiday (15% Funded)	per hour increase
*Supplemental Vacation (Funded)	to be allocated
Pension (Funded)	
Health Care (Funded)	
Apprenticeship Fund	
Retiree Benefit (Funded)	
Labor Management Education Committee	
IUOE National Training Fund	
DC Plan	
Gross Wage	

*Taxable Income

***Any Fringe Benefit adjustment will be allocated by the Union from the negotiated increases first or come off the Base Rate. The Allocation between wages and fringe benefits may be adjusted 30 days before June 1st of each contract year.*

CLASS II - WAGE AND FRINGE BENEFIT RATES
Effective first full payroll period on or after June 1, 2022

*Base Wage Per Hour	\$2.00
*Vacation & Holiday (15% Funded)	per hour increase
*Supplemental Vacation (Funded)	to be allocated
Pension (Funded)	
Health Care (Funded)	
Apprenticeship Fund	
Retiree Benefit (Funded)	
Labor Management Education Committee	
IUOE National Training Fund	
DC Plan	
Gross Wage	

*Taxable Income

***Any Fringe Benefit adjustment will be allocated by the Union from the negotiated increases first or come off the Base Rate. The Allocation between wages and fringe benefits may be adjusted 30 days before June 1st of each contract year.*

CLASS II - WAGE AND FRINGE BENEFIT RATES
Effective first full payroll period on or after June 1, 2023

*Base Wage Per Hour	\$2.00
*Vacation & Holiday (15% Funded)	per hour increase
*Supplemental Vacation (Funded)	to be allocated
Pension (Funded)	
Health Care (Funded)	
Apprenticeship Fund	
Retiree Benefit (Funded)	
Labor Management Education Committee	
IUOE National Training Fund	
DC Plan	
Gross Wage	

*Taxable Income

***Any Fringe Benefit adjustment will be allocated by the Union from the negotiated increases first or come off the Base Rate. The Allocation between wages and fringe benefits may be adjusted 30 days before June 1st of each contract year.*

Air Compressor with Throttle Valve or Clever Brooks type comb.
 Backhoe (with 3/8-yard bucket or less)
 Backhoe on Farm Type Tractor under 45 H.P.
 Batch Plant (concrete-dry batch)
 Cherry Picker under 15 ton
 Chip Spreader (self-propelled)
 Crusher Operator
 Concrete Pump
 Concrete Mesh Depressor--independently operated
 Concrete Spreader--Power Driven
 End Loader under 1-1/2 cu yd.
 Guniting Machine
 Head Greaser
 Lowboy Operator
 Mesh or Steel Placer (motorized)
 Multiple Tamping Machine (R.R.)
 Power Curing Spraying Machine (Formless)
 P.C.C. Concrete Belt Placer (form type)
 Pull Grader--Power Control
 Refrigerating Machine--Freezing operation
 Ross Carrier

Self-propelled convey transfer devise.
 Sheepfoot Roller (self-propelled)
 Side Boom Tractor (smaller than D-4 type or equivalent)
 Sweeper (Wayne type and similar equipment)
 Telescoping laser finish machine (laser screed)
 Macadam, Brick Surface
 Tinning or Broom Machine (Formless)
 Trench Machine 24" and under
 Tube Float (motorized)
 Washing Plant Operator Welder

CLASS II - GREASE TRUCK WAGE AND FRINGE BENEFIT RATES
Effective first full payroll period on or after April 1, 2019

*Base Wage Per Hour	\$24.28
*Vacation & Holiday (15% Funded)	\$ 3.65
*Supplemental Vacation (Funded)	\$ 0.05
Pension (Funded)	\$12.95
Health Care (Funded)	\$ 8.40
Apprenticeship Fund	\$ 1.00
Retiree Benefit (Funded)	\$ 0.45
Labor Management Education Committee	\$ 0.16
IUOE National Training Fund	\$ 0.05
DC Plan	<u>\$ 1.00</u>
	\$51.99

Effective first full payroll period on or after June 1, 2019

MUCG Industry Advancement Fund	<u>\$0.03</u>
Road Labor Management Fund	<u>\$0.05</u>

Taxable Income

***Any Fringe Benefit adjustment will be allocated by the Union from the negotiated increases first or come off the Base Rate. The Allocation between wages and fringe benefits may be adjusted 30 days before June 1st of each contract year.*

CLASS II - GREASE TRUCK WAGE AND FRINGE BENEFIT RATES
Effective first full payroll period on or after June 1, 2019

*Base Wage Per Hour	\$1.25
*Vacation & Holiday (15% Funded)	per hour increase
*Supplemental Vacation (Funded)	to be allocated
Pension (Funded)	
Health Care (Funded)	
Apprenticeship Fund	
Retiree Benefit (Funded)	
Labor Management Education Committee	
IUOE National Training Fund	
DC Plan	
Gross Wage	

Taxable Income

***Any Fringe Benefit adjustment will be allocated by the Union from the negotiated increases first or come off the Base Rate. The Allocation between wages and fringe benefits may be adjusted 30 days before June 1st of each contract year.*

CLASS II - GREASE TRUCK WAGE AND FRINGE BENEFIT RATES
Effective first full payroll period on or after June 1, 2020

*Base Wage Per Hour	\$1.25
*Vacation & Holiday (15% Funded)	per hour increase
*Supplemental Vacation (Funded)	to be allocated
Pension (Funded)	
Health Care (Funded)	
Apprenticeship Fund	
Retiree Benefit (Funded)	
Labor Management Education Committee	
IUOE National Training Fund	
DC Plan	
Gross Wage	

Taxable Income

***Any Fringe Benefit adjustment will be allocated by the Union from the negotiated increases first or come off the Base Rate. The Allocation between wages and fringe benefits may be adjusted 30 days before June 1st of each contract year.*

CLASS II - GREASE TRUCK WAGE AND FRINGE BENEFIT RATES
Effective first full payroll period on or after June 1, 2021

*Base Wage Per Hour	\$2.00
*Vacation & Holiday (15% Funded)	per hour increase
*Supplemental Vacation (Funded)	to be allocated
Pension (Funded)	
Health Care (Funded)	
Apprenticeship Fund	
Retiree Benefit (Funded)	
Labor Management Education Committee	
IUOE National Training Fund	
DC Plan	
Gross Wage	

Taxable Income

***Any Fringe Benefit adjustment will be allocated by the Union from the negotiated increases first or come off the Base Rate. The Allocation between wages and fringe benefits may be adjusted 30 days before June 1st of each contract year.*

CLASS II - GREASE TRUCK WAGE AND FRINGE BENEFIT RATES
Effective first full payroll period on or after June 1, 2022

*Base Wage Per Hour	\$2.00
*Vacation & Holiday (15% Funded)	per hour increase
*Supplemental Vacation (Funded)	to be allocated
Pension (Funded)	
Health Care (Funded)	
Apprenticeship Fund	
Retiree Benefit (Funded)	
Labor Management Education Committee	
IUOE National Training Fund	
DC Plan	
Gross Wage	

Taxable Income

***Any Fringe Benefit adjustment will be allocated by the Union from the negotiated increases first or come off the Base Rate. The Allocation between wages and fringe benefits may be adjusted 30 days before June 1st of each contract year.*

CLASS II - GREASE TRUCK WAGE AND FRINGE BENEFIT RATES
Effective first full payroll period on or after June 1, 2023

*Base Wage Per Hour	\$2.00
*Vacation & Holiday (15% Funded)	per hour increase
*Supplemental Vacation (Funded)	to be allocated
Pension (Funded)	
Health Care (Funded)	
Apprenticeship Fund	
Retiree Benefit (Funded)	
Labor Management Education Committee	
IUOE National Training Fund	
DC Plan	
Gross Wage	

Taxable Income

***Any Fringe Benefit adjustment will be allocated by the Union from the negotiated increases first or come off the Base Rate. The Allocation between wages and fringe benefits may be adjusted 30 days before June 1st of each contract year.*

CLASS III - WAGE AND FRINGE BENEFIT RATES
Effective first full payroll period on or after April 1, 2019

*Base Wage Per Hour	\$22.67
*Vacation & Holiday (15% Funded)	\$ 3.40
*Supplemental Vacation (Funded)	\$ 0.05
Pension (Funded)	\$12.95
Health Care (Funded)	\$ 8.40
Apprenticeship Fund	\$ 1.00
Retiree Benefit (Funded)	\$ 0.45
Labor Management Education Committee	\$ 0.16
IUOE National Training Fund	\$ 0.05
DC Plan	<u>\$ 1.00</u>
	\$50.13

Effective first full payroll period on or after June 1, 2019

MUCG Industry Advancement Fund	<u>\$0.03</u>
Road Labor Management Fund	<u>\$0.05</u>

*Taxable Income

***Any Fringe Benefit adjustment will be allocated by the Union from the negotiated increases first or come off the Base Rate. The Allocation between wages and fringe benefits may be adjusted 30 days before June 1st of each contract year.*

CLASS III - WAGE AND FRINGE BENEFIT RATES

Effective first full payroll period on or after June 1, 2019

*Base Wage Per Hour	\$1.25
*Vacation & Holiday (15% Funded)	per hour increase
*Supplemental Vacation (Funded)	to be allocated
Pension (Funded)	
Health Care (Funded)	
Apprenticeship Fund	
Retiree Benefit (Funded)	
Labor Management Education Committee	
IUOE National Training Fund	
DC Plan	
Gross Wage	

CLASS III - WAGE AND FRINGE BENEFIT RATES

Effective first full payroll period on or after June 1, 2020

*Base Wage Per Hour	\$1.25
*Vacation & Holiday (15% Funded)	per hour increase
*Supplemental Vacation (Funded)	to be allocated
Pension (Funded)	
Health Care (Funded)	
Apprenticeship Fund	
Retiree Benefit (Funded)	
Labor Management Education Committee	
IUOE National Training Fund	
DC Plan	
Gross Wage	

*Taxable Income

***Any Fringe Benefit adjustment will be allocated by the Union from the negotiated increases first or come off the Base Rate. The Allocation between wages and fringe benefits may be adjusted 30 days before June 1st of each contract year.*

CLASS III - WAGE AND FRINGE BENEFIT RATES

Effective first full payroll period on or after June 1, 2021

*Base Wage Per Hour	\$2.00
*Vacation & Holiday (15% Funded)	per hour increase
*Supplemental Vacation (Funded)	to be allocated
Pension (Funded)	
Health Care (Funded)	
Apprenticeship Fund	
Retiree Benefit (Funded)	
Labor Management Education Committee	
IUOE National Training Fund	
DC Plan	
Gross Wage	

Taxable Income

***Any Fringe Benefit adjustment will be allocated by the Union from the negotiated increases first or come off the Base Rate. The Allocation between wages and fringe benefits may be adjusted 30 days before June 1st of each contract year.*

CLASS III - WAGE AND FRINGE BENEFIT RATES

Effective first full payroll period on or after June 1, 2022

*Base Wage Per Hour	\$2.00
*Vacation & Holiday (15% Funded)	per hour increase
*Supplemental Vacation (Funded)	to be allocated
Pension (Funded)	
Health Care (Funded)	
Apprenticeship Fund	
Retiree Benefit (Funded)	
Labor Management Education Committee	
IUOE National Training Fund	
DC Plan	
Gross Wage	

*Taxable Income

***Any Fringe Benefit adjustment will be allocated by the Union from the*

negotiated increases first or come off the Base Rate. The Allocation between wages and fringe benefits may be adjusted 30 days before June 1st of each contract year.

CLASS III - WAGE AND FRINGE BENEFIT RATES
Effective first full payroll period on or after June 1, 2023

*Base Wage Per Hour	\$2.00
*Vacation & Holiday (15% Funded)	per hour increase
*Supplemental Vacation (Funded)	to be allocated
Pension (Funded)	
Health Care (Funded)	
Apprenticeship Fund	
Retiree Benefit (Funded)	
Labor Management Education Committee	
IUOE National Training Fund	
DC Plan	
Gross Wage	

*Taxable Income

***Any Fringe Benefit adjustment will be allocated by the Union from the negotiated increases first or come off the Base Rate. The Allocation between wages and fringe benefits may be adjusted 30 days before June 1st of each contract year.*

Assistant Plant Engineer
Base Paver (Jersey or similar type machine) Concrete Breaker
Concrete Finishing Machine
Curb Machine
Farm Tractor-incl. farm tractor with all attachments except backhoe
and incl. highlift end loaders of 1 cu. yd. capacity or less
Fireman (on boiler)
Hoist (one drum)
Jacks - Hydraulic Power Driven multiple jack system
Operator. 5 pcs. of minor equip.
Paving Breaker
Power Broom Self-propelled
Roller (Earth & Sub-base material)
Screening Plant Operator
Slurry Seal Machine
Spike Machine (R.R.)
Tamper--Multiple Vibrating--Earth and Sub-base material

CONTRACT

THIS CONTRACT is between the CITY OF ANN ARBOR, a Michigan Municipal Corporation, 301 East Huron Street, Ann Arbor, Michigan 48104 ("City") and Hoffman Bros. Inc. ("Contractor"), a Michigan Corporation, 8574 Verona Road, Battle Creek, MI 49014.

Based upon the mutual promises below, the Contractor and the City agree as follows:

ARTICLE I - Scope of Work

The Contractor agrees to furnish all of the materials, equipment and labor necessary; and to abide by all the duties and responsibilities applicable to it for the project titled School Girls Glen Culvert Reconstruction – Nichols Drive, ITB No. 4689 in accordance with the requirements and provisions of the following documents, including all written modifications incorporated into any of the documents, all of which are incorporated as part of this Contract:

Non-discrimination and Living Wage Declaration of Compliance Forms (if applicable)	General Conditions
Vendor Conflict of Interest Form	Standard Specifications
Prevailing Wage Declaration of Compliance Form (if applicable)	Detailed Specifications
Bid Forms	Plans
Contract and Exhibits	Addenda
Bonds	

ARTICLE II - Definitions

Administering Service Area/Unit means Public Services Area/Engineering Unit

Project means **School Girls Glen Culvert Replacement, ITB #4689**

Supervising Professional means the person acting under the authorization of the manager of the Administering Service Area/Unit. At the time this Contract is executed, the Supervising Professional is: Brian Slizewski, P.E. whose job title is Project Manager. If there is any question concerning who the Supervising Professional is, Contractor shall confirm with the manager of the Administering Service Area/Unit.

Contractor's Representative means Eric Stahley whose job title is Project Manager.

ARTICLE III - Time of Completion

- (A) The work to be completed under this Contract shall begin immediately on the date specified in the Notice to Proceed issued by the City.

- (B) The entire work for this Contract shall be completed within the timeframe specified in the Detailed Specification, Project Schedule.
- (C) Failure to complete all the work within the time specified above, including any extension granted in writing by the Supervising Professional, shall obligate the Contractor to pay the City, as liquidated damages specified in the Detailed Specifications, Project Schedule. If any liquidated damages are unpaid by the Contractor, the City shall be entitled to deduct these unpaid liquidated damages from the monies due the Contractor.

The liquidated damages are for the non-quantifiable aspects of any of the previously identified events and do not cover actual damages that can be shown or quantified nor are they intended to preclude recovery of actual damages in addition to the recovery of liquidated damages.

ARTICLE IV - The Contract Sum

- (A) The City shall pay to the Contractor for the performance of the Contract, the unit prices as given in the Bid Form for the estimated bid total of:

Three Hundred Thirty-Nine Thousand, Eight Hundred Eighty-Six 46/100 Dollars (\$339,886.46)
- (B) The amount paid shall be equitably adjusted to cover changes in the work ordered by the Supervising Professional but not required by the Contract Documents. Increases or decreases shall be determined only by written agreement between the City and Contractor.

ARTICLE V - Assignment

This Contract may not be assigned or subcontracted any portion of any right or obligation under this contract without the written consent of the City. Notwithstanding any consent by the City to any assignment, Contractor shall at all times remain bound to all warranties, certifications, indemnifications, promises and performances, however described, as are required of it under this contract unless specifically released from the requirement, in writing, by the City.

ARTICLE VI - Choice of Law

This Contract shall be construed, governed, and enforced in accordance with the laws of the State of Michigan. By executing this Contract, the Contractor and the City agree to venue in a court of appropriate jurisdiction sitting within Washtenaw County for purposes of any action arising under this Contract. The parties stipulate that the venue referenced in this Contract is for convenience and waive any claim of non-convenience.

Whenever possible, each provision of the Contract will be interpreted in a manner as to be effective and valid under applicable law. The prohibition or invalidity, under applicable law, of any provision will not invalidate the remainder of the Contract.

ARTICLE VII - Relationship of the Parties

The parties of the Contract agree that it is not a Contract of employment but is a Contract to

accomplish a specific result. Contractor is an independent Contractor performing services for the City. Nothing contained in this Contract shall be deemed to constitute any other relationship between the City and the Contractor.

Contractor certifies that it has no personal or financial interest in the project other than the compensation it is to receive under the Contract. Contractor certifies that it is not, and shall not become, overdue or in default to the City for any Contract, debt, or any other obligation to the City including real or personal property taxes. City shall have the right to set off any such debt against compensation awarded for services under this Contract.

ARTICLE VIII - Notice

All notices given under this Contract shall be in writing, and shall be by personal delivery or by certified mail with return receipt requested to the parties at their respective addresses as specified in the Contract Documents or other address the Contractor may specify in writing. Notice will be deemed given on the date when one of the following first occur: (1) the date of actual receipt; or (2) three days after mailing certified U.S. mail.

ARTICLE IX - Indemnification

To the fullest extent permitted by law, Contractor shall indemnify, defend and hold the City, its officers, employees and agents harmless from all suits, claims, judgments and expenses including attorney's fees resulting or alleged to result, in whole or in part, from any act or omission, which is in any way connected or associated with this Contract, by the Contractor or anyone acting on the Contractor's behalf under this Contract. Contractor shall not be responsible to indemnify the City for losses or damages caused by or resulting from the City's sole negligence. The provisions of this Article shall survive the expiration or earlier termination of this contract for any reason.

ARTICLE X - Entire Agreement

This Contract represents the entire understanding between the City and the Contractor and it supersedes all prior representations, negotiations, agreements, or understandings whether written or oral. Neither party has relied on any prior representations in entering into this Contract. No terms or conditions of either party's invoice, purchase order or other administrative document shall modify the terms and conditions of this Contract, regardless of the other party's failure to object to such form. This Contract shall be binding on and shall inure to the benefit of the parties to this Contract and their permitted successors and permitted assigns and nothing in this Contract, express or implied, is intended to or shall confer on any other person or entity any legal or equitable right, benefit, or remedy of any nature whatsoever under or by reason of this Contract. This Contract may be altered, amended or modified only by written amendment signed by the City and the Contractor.

ARTICLE XI – Electronic Transactions

The City and Contractor agree that signatures on this Contract may be delivered electronically in lieu of an original signature and agree to treat electronic signatures as original signatures that bind them to this Contract. This Contract may be executed and delivered by facsimile and upon such delivery, the facsimile signature will be deemed to have the same effect as if the original signature had been delivered to the other party.

FOR CONTRACTOR

By _____

Its: _____

FOR THE CITY OF ANN ARBOR

By _____
Christopher Taylor, Mayor

By _____
Jacqueline Beaudry, City Clerk

Approved as to substance

By _____
John Fournier, Interim City Administrator

By _____
Craig Hupy
Public Services Area Administrator

Approved as to form and content

Stephen K. Postema, City Attorney

PERFORMANCE BOND

- (1) of _____ (referred to as "Principal"), and _____, a corporation duly authorized to do business in the State of Michigan (referred to as "Surety"), are bound to the City of Ann Arbor, Michigan (referred to as "City"), for \$ _____, the payment of which Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, by this bond.
- (2) The Principal has entered a written Contract with the City entitled _____
_____, for ITB No. _____ and this bond is given for that Contract in compliance with Act No. 213 of the Michigan Public Acts of 1963, as amended, being MCL 129.201 *et seq.*
- (3) Whenever the Principal is declared by the City to be in default under the Contract, the Surety may promptly remedy the default or shall promptly:
 - (a) complete the Contract in accordance with its terms and conditions; or
 - (b) obtain a bid or bids for submission to the City for completing the Contract in accordance with its terms and conditions, and upon determination by Surety of the lowest responsible bidder, arrange for a Contract between such bidder and the City, and make available, as work progresses, sufficient funds to pay the cost of completion less the balance of the Contract price; but not exceeding, including other costs and damages for which Surety may be liable hereunder, the amount set forth in paragraph 1.
- (4) Surety shall have no obligation to the City if the Principal fully and promptly performs under the Contract.
- (5) Surety agrees that no change, extension of time, alteration or addition to the terms of the Contract or to the work to be performed thereunder, or the specifications accompanying it shall in any way affect its obligations on this bond, and waives notice of any such change, extension of time, alteration or addition to the terms of the Contract or to the work, or to the specifications.
- (6) Principal, Surety, and the City agree that signatures on this bond may be delivered electronically in lieu of an original signature and agree to treat electronic signatures as original signatures that bind them to this bond. This bond may be executed and delivered by facsimile and upon such delivery, the facsimile signature will be deemed to have the same effect as if the original signature had been delivered to the other party.

SIGNED AND SEALED this _____ day of _____, 202_.

(Name of Surety Company)
By _____
(Signature)
Its _____
(Title of Office)

(Name of Principal)
By _____
(Signature)
Its _____
(Title of Office)

Approved as to form:

Stephen K. Postema, City Attorney

Name and address of agent:

LABOR AND MATERIAL BOND

- (1) _____
of _____ (referred to as "Principal"), and _____, a corporation duly authorized to do business in the State of Michigan, (referred to as "Surety"), are bound to the City of Ann Arbor, Michigan (referred to as "City"), for the use and benefit of claimants as defined in Act 213 of Michigan Public Acts of 1963, as amended, being MCL 129.201 et seq., in the amount of \$ _____, for the payment of which Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, by this bond.
- (2) The Principal has entered a written Contract with the City entitled _____

_____, for ITB No. _____; and this bond is given for that Contract in compliance with Act No. 213 of the Michigan Public Acts of 1963 as amended;
- (3) If the Principal fails to promptly and fully repay claimants for labor and material reasonably required under the Contract, the Surety shall pay those claimants.
- (4) Surety's obligations shall not exceed the amount stated in paragraph 1, and Surety shall have no obligation if the Principal promptly and fully pays the claimants.
- (5) Principal, Surety, and the City agree that signatures on this bond may be delivered electronically in lieu of an original signature and agree to treat electronic signatures as original signatures that bind them to this bond. This bond may be executed and delivered by facsimile and upon such delivery, the facsimile signature will be deemed to have the same effect as if the original signature had been delivered to the other party.

SIGNED AND SEALED this _____ day of _____, 202__

(Name of Surety Company)
By _____
(Signature)
Its _____
(Title of Office)

Approved as to form:

Stephen K. Postema, City Attorney

(Name of Principal)
By _____
(Signature)
Its _____
(Title of Office)

Name and address of agent:

GENERAL CONDITIONS

Section 1 - Execution, Correlation and Intent of Documents

The contract documents shall be signed in 2 copies by the City and the Contractor.

The contract documents are complementary and what is called for by any one shall be binding. The intention of the documents is to include all labor and materials, equipment and transportation necessary for the proper execution of the work. Materials or work described in words which so applied have a well-known technical or trade meaning have the meaning of those recognized standards.

In case of a conflict among the contract documents listed below in any requirement(s), the requirement(s) of the document listed first shall prevail over any conflicting requirement(s) of a document listed later.

(1) Addenda in reverse chronological order; (2) Detailed Specifications; (3) Standard Specifications; (4) Plans; (5) General Conditions; (6) Contract; (7) Bid Forms; (8) Bond Forms; (9) Bid.

Section 2 - Order of Completion

The Contractor shall submit with each invoice, and at other times reasonably requested by the Supervising Professional, schedules showing the order in which the Contractor proposes to carry on the work. They shall include the dates at which the Contractor will start the several parts of the work, the estimated dates of completion of the several parts, and important milestones within the several parts.

Section 3 - Familiarity with Work

The Bidder or its representative shall make personal investigations of the site of the work and of existing structures and shall determine to its own satisfaction the conditions to be encountered, the nature of the ground, the difficulties involved, and all other factors affecting the work proposed under this Contract. The Bidder to whom this Contract is awarded will not be entitled to any additional compensation unless conditions are clearly different from those which could reasonably have been anticipated by a person making diligent and thorough investigation of the site.

The Bidder shall immediately notify the City upon discovery, and in every case prior to submitting its Bid, of every error or omission in the bidding documents that would be identified by a reasonably competent, diligent Bidder. In no case will a Bidder be allowed the benefit of extra compensation or time to complete the work under this Contract for extra expenses or time spent as a result of the error or omission.

Section 4 - Wage Requirements

Under this Contract, the Contractor shall conform to Chapter 14 of Title I of the Code of the City of Ann Arbor as amended; which in part states "...that all craftsmen, mechanics and laborers employed directly on the site in connection with said improvements, including said employees of

subcontractors, shall receive the prevailing wage for the corresponding classes of craftsmen, mechanics and laborers, as determined by statistics for the Ann Arbor area compiled by the United States Department of Labor. At the request of the City, any contractor or subcontractor shall provide satisfactory proof of compliance with the contract provisions required by the Section.

Pursuant to Resolution R-16-469 all public improvement contractors are subject to prevailing wage and will be required to provide to the City payroll records sufficient to demonstrate compliance with the prevailing wage requirements. A sample Prevailing Wage Form is provided in the Appendix herein for reference as to what will be expected from contractors. Use of the Prevailing Wage Form provided in the Appendix section or a City-approved equivalent will be required along with wage rate interviews.

Where the Contract and the Ann Arbor City Ordinance are silent as to definitions of terms required in determining contract compliance with regard to prevailing wages, the definitions provided in the Davis-Bacon Act as amended (40 U.S.C. 278-a to 276-a-7) for the terms shall be used.

If the Contractor is a "covered employer" as defined in Chapter 23 of the Ann Arbor City Code, the Contractor agrees to comply with the living wage provisions of Chapter 23 of the Ann Arbor City Code. The Contractor agrees to pay those employees providing Services to the City under this Contract a "living wage," as defined in Section 1:815 of the Ann Arbor City Code, as adjusted in accordance with Section 1:815(3); to post a notice approved by the City of the applicability of Chapter 23 in every location in which regular or contract employees providing services under this Contract are working; to maintain records of compliance; if requested by the City, to provide documentation to verify compliance; to take no action that would reduce the compensation, wages, fringe benefits, or leave available to any employee or person contracted for employment in order to pay the living wage required by Section 1:815; and otherwise to comply with the requirements of Chapter 23.

Contractor agrees that all subcontracts entered into by the Contractor shall contain similar wage provision covering subcontractor's employees who perform work on this contract.

Section 5 - Non-Discrimination

The Contractor agrees to comply, and to require its subcontractor(s) to comply, with the nondiscrimination provisions of MCL 37.2209. The Contractor further agrees to comply with the provisions of Section 9:158 of Chapter 112 of Title IX of the Ann Arbor City Code, and to assure that applicants are employed and that employees are treated during employment in a manner which provides equal employment opportunity.

Section 6 - Materials, Appliances, Employees

Unless otherwise stipulated, the Contractor shall provide and pay for all materials, labor, water, tools, equipment, light, power, transportation, and other facilities necessary or used for the execution and completion of the work. Unless otherwise specified, all materials incorporated in the permanent work shall be new, and both workmanship and materials shall be of the highest quality. The Contractor shall, if required, furnish satisfactory evidence as to the kind and quality of materials.

The Contractor shall at all times enforce strict discipline and good order among its employees, and shall seek to avoid employing on the work any unfit person or anyone not skilled in the work

assigned.

Adequate sanitary facilities shall be provided by the Contractor.

Section 7 - Qualifications for Employment

The Contractor shall employ competent laborers and mechanics for the work under this Contract. For work performed under this Contract, employment preference shall be given to qualified local residents.

Section 8 - Royalties and Patents

The Contractor shall pay all royalties and license fees. It shall defend all suits or claims for infringements of any patent rights and shall hold the City harmless from loss on account of infringement except that the City shall be responsible for all infringement loss when a particular process or the product of a particular manufacturer or manufacturers is specified, unless the City has notified the Contractor prior to the signing of the Contract that the particular process or product is patented or is believed to be patented.

Section 9 - Permits and Regulations

The Contractor must secure and pay for all permits, permit or plan review fees and licenses necessary for the prosecution of the work. These include but are not limited to City building permits, right-of-way permits, lane closure permits, right-of-way occupancy permits, and the like. The City shall secure and pay for easements shown on the plans unless otherwise specified.

The Contractor shall give all notices and comply with all laws, ordinances, rules and regulations bearing on the conduct of the work as drawn and specified. If the Contractor observes that the contract documents are at variance with those requirements, it shall promptly notify the Supervising Professional in writing, and any necessary changes shall be adjusted as provided in the Contract for changes in the work.

Section 10 - Protection of the Public and of Work and Property

The Contractor is responsible for the means, methods, sequences, techniques and procedures of construction and safety programs associated with the work contemplated by this contract. The Contractor, its agents or sub-contractors, shall comply with the "General Rules and Regulations for the Construction Industry" as published by the Construction Safety Commission of the State of Michigan and to all other local, State and National laws, ordinances, rules and regulations pertaining to safety of persons and property.

The Contractor shall take all necessary and reasonable precautions to protect the safety of the public. It shall continuously maintain adequate protection of all work from damage, and shall take all necessary and reasonable precautions to adequately protect all public and private property from injury or loss arising in connection with this Contract. It shall make good any damage, injury or loss to its work and to public and private property resulting from lack of reasonable protective precautions, except as may be due to errors in the contract documents, or caused by agents or employees of the City. The Contractor shall obtain and maintain sufficient insurance to cover damage to any City property at the site by any cause.

In an emergency affecting the safety of life, or the work, or of adjoining property, the Contractor is, without special instructions or authorization from the Supervising Professional, permitted to act at its discretion to prevent the threatened loss or injury. It shall also so act, without appeal, if authorized or instructed by the Supervising Professional.

Any compensation claimed by the Contractor for emergency work shall be determined by agreement or in accordance with the terms of Claims for Extra Cost - Section 15.

Section 11 - Inspection of Work

The City shall provide sufficient competent personnel for the inspection of the work.

The Supervising Professional shall at all times have access to the work whenever it is in preparation or progress, and the Contractor shall provide proper facilities for access and for inspection.

If the specifications, the Supervising Professional's instructions, laws, ordinances, or any public authority require any work to be specially tested or approved, the Contractor shall give the Supervising Professional timely notice of its readiness for inspection, and if the inspection is by an authority other than the Supervising Professional, of the date fixed for the inspection. Inspections by the Supervising Professional shall be made promptly, and where practicable at the source of supply. If any work should be covered up without approval or consent of the Supervising Professional, it must, if required by the Supervising Professional, be uncovered for examination and properly restored at the Contractor's expense.

Re-examination of any work may be ordered by the Supervising Professional, and, if so ordered, the work must be uncovered by the Contractor. If the work is found to be in accordance with the contract documents, the City shall pay the cost of re-examination and replacement. If the work is not in accordance with the contract documents, the Contractor shall pay the cost.

Section 12 - Superintendence

The Contractor shall keep on the work site, during its progress, a competent superintendent and any necessary assistants, all satisfactory to the Supervising Professional. The superintendent will be responsible to perform all on-site project management for the Contractor. The superintendent shall be experienced in the work required for this Contract. The superintendent shall represent the Contractor and all direction given to the superintendent shall be binding as if given to the Contractor. Important directions shall immediately be confirmed in writing to the Contractor. Other directions will be confirmed on written request. The Contractor shall give efficient superintendence to the work, using its best skill and attention.

Section 13 - Changes in the Work

The City may make changes to the quantities of work within the general scope of the Contract at any time by a written order and without notice to the sureties. If the changes add to or deduct from the extent of the work, the Contract Sum shall be adjusted accordingly. All the changes shall be executed under the conditions of the original Contract except that any claim for extension of time caused by the change shall be adjusted at the time of ordering the change.

In giving instructions, the Supervising Professional shall have authority to make minor changes in

the work not involving extra cost and not inconsistent with the purposes of the work, but otherwise, except in an emergency endangering life or property, no extra work or change shall be made unless in pursuance of a written order by the Supervising Professional, and no claim for an addition to the Contract Sum shall be valid unless the additional work was ordered in writing.

The Contractor shall proceed with the work as changed and the value of the work shall be determined as provided in Claims for Extra Cost - Section 15.

Section 14 - Extension of Time

Extension of time stipulated in the Contract for completion of the work will be made if and as the Supervising Professional may deem proper under any of the following circumstances:

- (1) When work under an extra work order is added to the work under this Contract;
- (2) When the work is suspended as provided in Section 20;
- (3) When the work of the Contractor is delayed on account of conditions which could not have been foreseen, or which were beyond the control of the Contractor, and which were not the result of its fault or negligence;
- (4) Delays in the progress of the work caused by any act or neglect of the City or of its employees or by other Contractors employed by the City;
- (5) Delay due to an act of Government;
- (6) Delay by the Supervising Professional in the furnishing of plans and necessary information;
- (7) Other cause which in the opinion of the Supervising Professional entitles the Contractor to an extension of time.

The Contractor shall notify the Supervising Professional within 7 days of an occurrence or conditions which, in the Contractor's opinion, entitle it to an extension of time. The notice shall be in writing and submitted in ample time to permit full investigation and evaluation of the Contractor's claim. The Supervising Professional shall acknowledge receipt of the Contractor's notice within 7 days of its receipt. Failure to timely provide the written notice shall constitute a waiver by the Contractor of any claim.

In situations where an extension of time in contract completion is appropriate under this or any other section of the contract, the Contractor understands and agrees that the only available adjustment for events that cause any delays in contract completion shall be extension of the required time for contract completion and that there shall be no adjustments in the money due the Contractor on account of the delay.

Section 15 - Claims for Extra Cost

If the Contractor claims that any instructions by drawings or other media issued after the date of the Contract involved extra cost under this Contract, it shall give the Supervising Professional written notice within 7 days after the receipt of the instructions, and in any event before proceeding to execute the work, except in emergency endangering life or property. The procedure shall then be as provided for Changes in the Work-Section 13. No claim shall be valid unless so made.

If the Supervising Professional orders, in writing, the performance of any work not covered by the contract documents, and for which no item of work is provided in the Contract, and for which no unit price or lump sum basis can be agreed upon, then the extra work shall be done on a Cost-Plus-Percentage basis of payment as follows:

- (1) The Contractor shall be reimbursed for all reasonable costs incurred in doing the work, and shall receive an additional payment of 15% of all the reasonable costs to cover both its indirect overhead costs and profit;
- (2) The term "Cost" shall cover all payroll charges for employees and supervision required under the specific order, together with all worker's compensation, Social Security, pension and retirement allowances and social insurance, or other regular payroll charges on same; the cost of all material and supplies required of either temporary or permanent character; rental of all power-driven equipment at agreed upon rates, together with cost of fuel and supply charges for the equipment; and any costs incurred by the Contractor as a direct result of executing the order, if approved by the Supervising Professional;
- (3) If the extra is performed under subcontract, the subcontractor shall be allowed to compute its charges as described above. The Contractor shall be permitted to add an additional charge of 5% percent to that of the subcontractor for the Contractor's supervision and contractual responsibility;
- (4) The quantities and items of work done each day shall be submitted to the Supervising Professional in a satisfactory form on the succeeding day, and shall be approved by the Supervising Professional and the Contractor or adjusted at once;
- (5) Payments of all charges for work under this Section in any one month shall be made along with normal progress payments. Retainage shall be in accordance with Progress Payments-Section 16.

No additional compensation will be provided for additional equipment, materials, personnel, overtime or special charges required to perform the work within the time requirements of the Contract.

When extra work is required and no suitable price for machinery and equipment can be determined in accordance with this Section, the hourly rate paid shall be 1/40 of the basic weekly rate listed in the Rental Rate Blue Book published by Dataquest Incorporated and applicable to the time period the equipment was first used for the extra work. The hourly rate will be deemed to include all costs of operation such as bucket or blade, fuel, maintenance, "regional factors", insurance, taxes, and the like, but not the costs of the operator.

Section 16 - Progress Payments

The Contractor shall submit each month, or at longer intervals, if it so desires, an invoice covering work performed for which it believes payment, under the Contract terms, is due. The submission shall be to the City's Finance Department - Accounting Division. The Supervising Professional will, within 10 days following submission of the invoice, prepare a certificate for payment for the work in an amount to be determined by the Supervising Professional as fairly representing the acceptable work performed during the period covered by the Contractor's invoice. To insure the proper performance of this Contract, the City will retain a percentage of the estimate in accordance with Act 524, Public Acts of 1980. The City will then, following the receipt of the Supervising Professional's Certificate, make payment to the Contractor as soon as feasible, which is anticipated will be within 15 days.

An allowance may be made in progress payments if substantial quantities of permanent material have been delivered to the site but not incorporated in the completed work if the Contractor, in the opinion of the Supervising Professional, is diligently pursuing the work under this Contract. Such materials shall be properly stored and adequately protected. Allowance in the estimate shall be at the invoice price value of the items. Notwithstanding any payment of any allowance, all risk of loss due to vandalism or any damages to the stored materials remains with the Contractor.

In the case of Contracts which include only the Furnishing and Delivering of Equipment, the payments shall be; 60% of the Contract Sum upon the delivery of all equipment to be furnished, or in the case of delivery of a usable portion of the equipment in advance of the total equipment delivery, 60% of the estimated value of the portion of the equipment may be paid upon its delivery in advance of the time of the remainder of the equipment to be furnished; 30% of the Contract Sum upon completion of erection of all equipment furnished, but not later than 60 days after the date of delivery of all of the equipment to be furnished; and payment of the final 10% on final completion of erection, testing and acceptance of all the equipment to be furnished; but not later than 180 days after the date of delivery of all of the equipment to be furnished, unless testing has been completed and shows the equipment to be unacceptable.

With each invoice for periodic payment, the Contractor shall enclose a Contractor's Declaration - Section 43, and an updated project schedule per Order of Completion - Section 2.

Section 17 - Deductions for Uncorrected Work

If the Supervising Professional decides it is inexpedient to correct work that has been damaged or that was not done in accordance with the Contract, an equitable deduction from the Contract price shall be made.

Section 18 - Correction of Work Before Final Payment

The Contractor shall promptly remove from the premises all materials condemned by the Supervising Professional as failing to meet Contract requirements, whether incorporated in the work or not, and the Contractor shall promptly replace and re-execute the work in accordance with the Contract and without expense to the City and shall bear the expense of making good all work of other contractors destroyed or damaged by the removal or replacement.

If the Contractor does not remove the condemned work and materials within 10 days after written notice, the City may remove them and, if the removed material has value, may store the material

at the expense of the Contractor. If the Contractor does not pay the expense of the removal within 10 days thereafter, the City may, upon 10 days written notice, sell the removed materials at auction or private sale and shall pay to the Contractor the net proceeds, after deducting all costs and expenses that should have been borne by the Contractor. If the removed material has no value, the Contractor must pay the City the expenses for disposal within 10 days of invoice for the disposal costs.

The inspection or lack of inspection of any material or work pertaining to this Contract shall not relieve the Contractor of its obligation to fulfill this Contract and defective work shall be made good. Unsuitable materials may be rejected by the Supervising Professional notwithstanding that the work and materials have been previously overlooked by the Supervising Professional and accepted or estimated for payment or paid for. If the work or any part shall be found defective at any time before the final acceptance of the whole work, the Contractor shall forthwith make good the defect in a manner satisfactory to the Supervising Professional. The judgment and the decision of the Supervising Professional as to whether the materials supplied and the work done under this Contract comply with the requirements of the Contract shall be conclusive and final.

Section 19 - Acceptance and Final Payment

Upon receipt of written notice that the work is ready for final inspection and acceptance, the Supervising Professional will promptly make the inspection. When the Supervising Professional finds the work acceptable under the Contract and the Contract fully performed, the Supervising Professional will promptly sign and issue a final certificate stating that the work required by this Contract has been completed and is accepted by the City under the terms and conditions of the Contract. The entire balance found to be due the Contractor, including the retained percentage, shall be paid to the Contractor by the City within 30 days after the date of the final certificate.

Before issuance of final certificates, the Contractor shall file with the City:

- (1) The consent of the surety to payment of the final estimate;
- (2) The Contractor's Affidavit in the form required by Section 44.

In case the Affidavit or consent is not furnished, the City may retain out of any amount due the Contractor, sums sufficient to cover all lienable claims.

The making and acceptance of the final payment shall constitute a waiver of all claims by the City except those arising from:

- (1) unsettled liens;
- (2) faulty work appearing within 12 months after final payment;
- (3) hidden defects in meeting the requirements of the plans and specifications;
- (4) manufacturer's guarantees.

It shall also constitute a waiver of all claims by the Contractor, except those previously made and still unsettled.

Section 20 - Suspension of Work

The City may at any time suspend the work, or any part by giving 5 days notice to the Contractor in writing. The work shall be resumed by the Contractor within 10 days after the date fixed in the

written notice from the City to the Contractor to do so. The City shall reimburse the Contractor for expense incurred by the Contractor in connection with the work under this Contract as a result of the suspension.

If the work, or any part, shall be stopped by the notice in writing, and if the City does not give notice in writing to the Contractor to resume work at a date within 90 days of the date fixed in the written notice to suspend, then the Contractor may abandon that portion of the work suspended and will be entitled to the estimates and payments for all work done on the portions abandoned, if any, plus 10% of the value of the work abandoned, to compensate for loss of overhead, plant expense, and anticipated profit.

Section 21 - Delays and the City's Right to Terminate Contract

If the Contractor refuses or fails to prosecute the work, or any separate part of it, with the diligence required to insure completion, ready for operation, within the allowable number of consecutive calendar days specified plus extensions, or fails to complete the work within the required time, the City may, by written notice to the Contractor, terminate its right to proceed with the work or any part of the work as to which there has been delay. After providing the notice the City may take over the work and prosecute it to completion, by contract or otherwise, and the Contractor and its sureties shall be liable to the City for any excess cost to the City. If the Contractor's right to proceed is terminated, the City may take possession of and utilize in completing the work, any materials, appliances and plant as may be on the site of the work and useful for completing the work. The right of the Contractor to proceed shall not be terminated or the Contractor charged with liquidated damages where an extension of time is granted under Extension of Time - Section 14.

If the Contractor is adjudged a bankrupt, or if it makes a general assignment for the benefit of creditors, or if a receiver is appointed on account of its insolvency, or if it persistently or repeatedly refuses or fails except in cases for which extension of time is provided, to supply enough properly skilled workers or proper materials, or if it fails to make prompt payments to subcontractors or for material or labor, or persistently disregards laws, ordinances or the instructions of the Supervising Professional, or otherwise is guilty of a substantial violation of any provision of the Contract, then the City, upon the certificate of the Supervising Professional that sufficient cause exists to justify such action, may, without prejudice to any other right or remedy and after giving the Contractor 3 days written notice, terminate this Contract. The City may then take possession of the premises and of all materials, tools and appliances thereon and without prejudice to any other remedy it may have, make good the deficiencies or finish the work by whatever method it may deem expedient, and deduct the cost from the payment due the Contractor. The Contractor shall not be entitled to receive any further payment until the work is finished. If the expense of finishing the work, including compensation for additional managerial and administrative services exceeds the unpaid balance of the Contract Sum, the Contractor and its surety are liable to the City for any excess cost incurred. The expense incurred by the City, and the damage incurred through the Contractor's default, shall be certified by the Supervising Professional.

Section 22 - Contractor's Right to Terminate Contract

If the work should be stopped under an order of any court, or other public authority, for a period of 3 months, through no act or fault of the Contractor or of anyone employed by it, then the Contractor may, upon 7 days written notice to the City, terminate this Contract and recover from the City payment for all acceptable work executed plus reasonable profit.

Section 23 - City's Right To Do Work

If the Contractor should neglect to prosecute the work properly or fail to perform any provision of this Contract, the City, 3 days after giving written notice to the Contractor and its surety may, without prejudice to any other remedy the City may have, make good the deficiencies and may deduct the cost from the payment due to the Contractor.

Section 24 - Removal of Equipment and Supplies

In case of termination of this Contract before completion, from any or no cause, the Contractor, if notified to do so by the City, shall promptly remove any part or all of its equipment and supplies from the property of the City, failing which the City shall have the right to remove the equipment and supplies at the expense of the Contractor.

The removed equipment and supplies may be stored by the City and, if all costs of removal and storage are not paid by the Contractor within 10 days of invoicing, the City upon 10 days written notice may sell the equipment and supplies at auction or private sale, and shall pay the Contractor the net proceeds after deducting all costs and expenses that should have been borne by the Contractor and after deducting all amounts claimed due by any lien holder of the equipment or supplies.

Section 25 - Responsibility for Work and Warranties

The Contractor assumes full responsibility for any and all materials and equipment used in the construction of the work and may not make claims against the City for damages to materials and equipment from any cause except negligence or willful act of the City. Until its final acceptance, the Contractor shall be responsible for damage to or destruction of the project (except for any part covered by Partial Completion and Acceptance - Section 26). The Contractor shall make good all work damaged or destroyed before acceptance. All risk of loss remains with the Contractor until final acceptance of the work (Section 19) or partial acceptance (Section 26). The Contractor is advised to investigate obtaining its own builders risk insurance.

The Contractor shall guarantee the quality of the work for a period of one year. The Contractor shall also unconditionally guarantee the quality of all equipment and materials that are furnished and installed under the contract for a period of one year. At the end of one year after the Contractor's receipt of final payment, the complete work, including equipment and materials furnished and installed under the contract, shall be inspected by the Contractor and the Supervising Professional. Any defects shall be corrected by the Contractor at its expense as soon as practicable but in all cases within 60 days. Any defects that are identified prior to the end of one year shall also be inspected by the Contractor and the Supervising Professional and shall be corrected by the Contractor at its expense as soon as practicable but in all cases within 60 days. The Contractor shall assign all manufacturer or material supplier warranties to the City prior to final payment. The assignment shall not relieve the Contractor of its obligations under this paragraph to correct defects.

Section 26 - Partial Completion and Acceptance

If at any time prior to the issuance of the final certificate referred to in Acceptance and Final Payment - Section 19, any portion of the permanent construction has been satisfactorily completed, and if the Supervising Professional determines that portion of the permanent construction is not required for the operations of the Contractor but is needed by the City, the Supervising Professional shall issue to the Contractor a certificate of partial completion, and immediately the City may take over and use the portion of the permanent construction described in the certificate, and exclude the Contractor from that portion.

The issuance of a certificate of partial completion shall not constitute an extension of the Contractor's time to complete the portion of the permanent construction to which it relates if the Contractor has failed to complete it in accordance with the terms of this Contract. The issuance of the certificate shall not release the Contractor or its sureties from any obligations under this Contract including bonds.

If prior use increases the cost of, or delays the work, the Contractor shall be entitled to extra compensation, or extension of time, or both, as the Supervising Professional may determine.

Section 27 - Payments Withheld Prior to Final Acceptance of Work

The City may withhold or, on account of subsequently discovered evidence, nullify the whole or part of any certificate to the extent reasonably appropriate to protect the City from loss on account of:

- (1) Defective work not remedied;
- (2) Claims filed or reasonable evidence indicating probable filing of claims by other parties against the Contractor;
- (3) Failure of the Contractor to make payments properly to subcontractors or for material or labor;
- (4) Damage to another Contractor.

When the above grounds are removed or the Contractor provides a Surety Bond satisfactory to the City which will protect the City in the amount withheld, payment shall be made for amounts withheld under this section.

Section 28 - Contractor's Insurance

- (1) The Contractor shall procure and maintain during the life of this Contract, including the guarantee period and during any warranty work, such insurance policies, including those set forth below, as will protect itself and the City from all claims for bodily injuries, death or property damage that may arise under this Contract; whether the act(s) or omission(s) giving rise to the claim were made by the Contractor, any subcontractor, or anyone employed by them directly or indirectly. Prior to commencement of any work under this contract, Contractor shall provide to the City documentation satisfactory to the City, through City-approved means (currently myCOI), demonstrating it has obtained the required policies and endorsements. The certificates of insurance endorsements and/or copies of

policy language shall document that the Contractor satisfies the following minimum requirements. Contractor shall add registration@mycoitracking.com to its safe sender's list so that it will receive necessary communication from myCOI. When requested, Contractor shall provide the same documentation for its subcontractor(s) (if any).

Required insurance policies include:

- (a) Worker's Compensation Insurance in accordance with all applicable state and federal statutes. Further, Employers Liability Coverage shall be obtained in the following minimum amounts:

- Bodily Injury by Accident - \$500,000 each accident
 - Bodily Injury by Disease - \$500,000 each employee
 - Bodily Injury by Disease - \$500,000 each policy limit

- (b) Commercial General Liability Insurance equivalent to, as a minimum, Insurance Services Office form CG 00 01 04 13 or current equivalent. The City of Ann Arbor shall be named as an additional insured. There shall be no added exclusions or limiting endorsements specifically for the following coverages: Products and Completed Operations, Explosion, Collapse and Underground coverage or Pollution. Further there shall be no added exclusions or limiting endorsements that diminish the City's protections as an additional insured under the policy. The following minimum limits of liability are required:

- \$1,000,000 Each occurrence as respect Bodily Injury Liability or Property Damage Liability, or both combined.
 - \$2,000,000 Per Project General Aggregate
 - \$1,000,000 Personal and Advertising Injury
 - \$2,000,000 Products and Completed Operations Aggregate, which, notwithstanding anything to the contrary herein, shall be maintained for three years from the date the Project is completed.

- (c) Motor Vehicle Liability Insurance, including Michigan No-Fault Coverages, equivalent to, as a minimum, Insurance Services Office form CA 00 01 10 13 or current equivalent. Coverage shall include all owned vehicles, all non-owned vehicles and all hired vehicles. The City of Ann Arbor shall be named as an additional insured. There shall be no added exclusions or limiting endorsements that diminish the City's protections as an additional insured under the policy. Further, the limits of liability shall be \$1,000,000 for each occurrence as respects Bodily Injury Liability or Property Damage Liability, or both combined.

- (d) Umbrella/Excess Liability Insurance shall be provided to apply excess of the Commercial General Liability, Employers Liability and the Motor Vehicle coverage enumerated above, for each occurrence and for aggregate in the amount of \$1,000,000.

- (2) Insurance required under subsection (1)(b) and (1)(c) above shall be considered primary as respects any other valid or collectible insurance that the City may possess, including any self-insured retentions the City may have; and any other insurance the City does possess shall be considered excess insurance only and shall not be required to contribute with this insurance. Further, the Contractor agrees to waive any right of recovery by its

insurer against the City for any insurance listed herein.

- (3) Insurance companies and policy forms are subject to approval of the City Attorney, which approval shall not be unreasonably withheld. Documentation must provide and demonstrate an unconditional and un-qualified 30-day written notice of cancellation in favor of the City of Ann Arbor. Further, the documentation must explicitly state the following: (a) the policy number(s); name of insurance company(s); name and address of the agent(s) or authorized representative(s); name(s), email address(es), and address of insured; project name; policy expiration date; and specific coverage amounts; (b) any deductibles or self-insured retentions which may be approved by the City, in its sole discretion; (c) that the policy conforms to the requirements specified Contractor shall furnish the City with satisfactory certificates of insurance and endorsements prior to commencement of any work. Upon request, the Contractor shall provide within 30 days a copy of the policy(ies) and all required endorsements to the City. If any of the above coverages expire by their terms during the term of this Contract, the Contractor shall deliver proof of renewal and/or new policies and endorsements to the Administering Service Area/Unit at least ten days prior to the expiration date.
- (4) Any Insurance provider of Contractor shall be authorized to do business in the State of Michigan and shall carry and maintain a minimum rating assigned by A.M. Best & Company's Key Rating Guide of "A-" Overall and a minimum Financial Size Category of "V". Insurance policies and certificates issued by non-authorized insurance companies are not acceptable unless approved in writing by the City.
- (5) City reserves the right to require additional coverage and/or coverage amounts as may be included from time to time in the Detailed Specifications for the Project.
- (6) The provisions of General Condition 28 shall survive the expiration or earlier termination of this contract for any reason.

Section 29 - Surety Bonds

Bonds will be required from the successful bidder as follows:

- (1) A Performance Bond to the City of Ann Arbor for the amount of the bid(s) accepted;
- (2) A Labor and Material Bond to the City of Ann Arbor for the amount of the bid(s) accepted.

Bonds shall be executed on forms supplied by the City in a manner and by a Surety Company authorized to transact business in Michigan and satisfactory to the City Attorney.

Section 30 - Damage Claims

The Contractor shall be held responsible for all damages to property of the City or others, caused by or resulting from the negligence of the Contractor, its employees, or agents during the progress of or connected with the prosecution of the work, whether within the limits of the work or elsewhere. The Contractor must restore all property injured including sidewalks, curbing, sodding, pipes, conduit, sewers or other public or private property to not less than its original condition with new work.

Section 31 - Refusal to Obey Instructions

If the Contractor refuses to obey the instructions of the Supervising Professional, the Supervising Professional shall withdraw inspection from the work, and no payments will be made for work performed thereafter nor may work be performed thereafter until the Supervising Professional shall have again authorized the work to proceed.

Section 32 - Assignment

Neither party to the Contract shall assign the Contract without the written consent of the other. The Contractor may assign any monies due to it to a third party acceptable to the City.

Section 33 - Rights of Various Interests

Whenever work being done by the City's forces or by other contractors is contiguous to work covered by this Contract, the respective rights of the various interests involved shall be established by the Supervising Professional, to secure the completion of the various portions of the work in general harmony.

The Contractor is responsible to coordinate all aspects of the work, including coordination of, and with, utility companies and other contractors whose work impacts this project.

Section 34 - Subcontracts

The Contractor shall not award any work to any subcontractor without prior written approval of the City. The approval will not be given until the Contractor submits to the City a written statement concerning the proposed award to the subcontractor. The statement shall contain all information the City may require.

The Contractor shall be as fully responsible to the City for the acts and omissions of its subcontractors, and of persons either directly or indirectly employed by them, as it is for the acts and omissions of persons directly employed by it.

The Contractor shall cause appropriate provisions to be inserted in all subcontracts relative to the work to bind subcontractors to the Contractor by the terms of the General Conditions and all other contract documents applicable to the work of the subcontractors and to give the Contractor the same power to terminate any subcontract that the City may exercise over the Contractor under any provision of the contract documents.

Nothing contained in the contract documents shall create any contractual relation between any subcontractor and the City.

Section 35 - Supervising Professional's Status

The Supervising Professional has the right to inspect any or all work. The Supervising Professional has authority to stop the work whenever stoppage may be appropriate to insure the proper execution of the Contract. The Supervising Professional has the authority to reject all work and materials which do not conform to the Contract and to decide questions which arise in the execution of the work.

The Supervising Professional shall make all measurements and determinations of quantities. Those measurements and determinations are final and conclusive between the parties.

Section 36 - Supervising Professional's Decisions

The Supervising Professional shall, within a reasonable time after their presentation to the Supervising Professional, make decisions in writing on all claims of the City or the Contractor and on all other matters relating to the execution and progress of the work or the interpretation of the contract documents.

Section 37 - Storing Materials and Supplies

Materials and supplies may be stored at the site of the work at locations agreeable to the City unless specific exception is listed elsewhere in these documents. Ample way for foot traffic and drainage must be provided, and gutters must, at all times, be kept free from obstruction. Traffic on streets shall be interfered with as little as possible. The Contractor may not enter or occupy with agents, employees, tools, or material any private property without first obtaining written permission from its owner. A copy of the permission shall be furnished to the Supervising Professional.

Section 38 - Lands for Work

The Contractor shall provide, at its own expense and without liability to the City, any additional land and access that may be required for temporary construction facilities or for storage of materials.

Section 39 - Cleaning Up

The Contractor shall, as directed by the Supervising Professional, remove at its own expense from the City's property and from all public and private property all temporary structures, rubbish and waste materials resulting from its operations unless otherwise specifically approved, in writing, by the Supervising Professional.

Section 40 - Salvage

The Supervising Professional may designate for salvage any materials from existing structures or underground services. Materials so designated remain City property and shall be transported or stored at a location as the Supervising Professional may direct.

Section 41 - Night, Saturday or Sunday Work

No night or Sunday work (without prior written City approval) will be permitted except in the case of an emergency and then only to the extent absolutely necessary. The City may allow night work which, in the opinion of the Supervising Professional, can be satisfactorily performed at night. Night work is any work between 8:00 p.m. and 7:00 a.m. No Saturday work will be permitted unless the Contractor gives the Supervising Professional at least 48 hours but not more than 5 days notice of the Contractor's intention to work the upcoming Saturday.

Section 42 - Sales Taxes

Under State law the City is exempt from the assessment of State Sales Tax on its direct purchases. Contractors who acquire materials, equipment, supplies, etc. for incorporation in City projects are not likewise exempt. State Law shall prevail. The Bidder shall familiarize itself with the State Law and prepare its Bid accordingly. No extra payment will be allowed under this Contract for failure of the Contractor to make proper allowance in this bid for taxes it must pay.

Section 43

CONTRACTOR'S DECLARATION

I hereby declare that I have not, during the period _____, 20____, to _____, 20____, performed any work, furnished any materials, sustained any loss, damage or delay, or otherwise done anything in addition to the regular items (or executed change orders) set forth in the Contract titled _____, for which I shall ask, demand, sue for, or claim compensation or extension of time from the City, except as I hereby make claim for additional compensation or extension of time as set forth on the attached itemized statement. I further declare that I have paid all payroll obligations related to this Contract that have become due during the above period and that all invoices related to this Contract received more than 30 days prior to this declaration have been paid in full except as listed below.

There is/is not (Contractor please circle one and strike one as appropriate) an itemized statement attached regarding a request for additional compensation or extension of time.

Contractor

Date

By _____
(Signature)

Its _____
(Title of Office)

Past due invoices, if any, are listed below.

STANDARD SPECIFICATIONS

All work under this contract shall be performed in accordance with the Public Services Department Standard Specifications in effect at the date of availability of the contract documents stipulated in the Bid. All work under this Contract which is not included in these Standard Specifications, or which is performed using modifications to these Standard Specifications, shall be performed in accordance with the Detailed Specifications included in these contract documents.

Standard Specifications are available online:

<http://www.a2gov.org/departments/engineering/Pages/Engineering-and-Contractor-Resources.aspx>

DETAILED SPECIFICATIONS

CONTRACTOR QUALIFICATIONS

CITY OF ANN ARBOR DETAILED SPECIFICATION FOR CONTRACTOR QUALIFICATIONS

Fishbeck:PJK

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8/9/2021

a. General.- As detailed elsewhere in the Contract Documents and Drawings the work of this project is to be performed in a sensitive, valuable, natural area within the City of Ann Arbor (City), the University of Michigan (U of M) Campus and Hospital Complex, and residential areas abutting the arboretum. This Detailed Specification sets forth criteria that will be used by the City in determining if the Contractor has the necessary personnel, equipment, and experience to perform the work of this project.

b. Documentation to be provided.- The Contractor Qualifications detailed in this specification apply to the following items:

- Precast Box Culvert, Headwall, and Wingwall Construction
- Channel Stabilization
- Onsite Superintendent/Foreman

Contractor to complete the attached Reference Form and submit it as part of the bid submittal. **Not filling out the form or failing to provide past experience may result in disqualification of the bid.** If subcontractors are to be used for any of the above items, they are to fill out a separate form.

The projects claimed to have been performed by the Contractor shall be supported by owner references. The Contractor shall submit information to document their experience.

1. Precast Box Culvert, Headwall, and Wingwall Construction - The Contractor performing the culvert installation shall be fully qualified, experienced, and equipped to complete this work as shown on the Drawings and as indicated in the specifications. The Contractor shall have completed a minimum of 3 projects with similar details of work, including but not limited to the excavation and subgrade preparation, the culvert, headwall, and wingwall installation, backfill operations, and roadway restoration processes, in the past 7 years. The Contractor shall have also worked a minimum of three projects in similar environmentally sensitive areas in the past 7 years. The Contractor shall provide detailed description of these projects and methods used to mitigate the work upon request of the Engineer.

CONTRACTOR QUALIFICATIONS

CITY OF ANN ARBOR DETAILED SPECIFICATION FOR CONTRACTOR QUALIFICATIONS

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2. **Channel Stabilization** - The Contractor performing the channel stabilization work shall be fully qualified, experienced, and equipped to complete this work expeditiously and in a satisfactory manner. The Contractor shall have completed a minimum of 2 projects with similar details of work, including but not limited to the excavation and subgrade preparation, backfill operations, and stream channel restoration processes, in the past 7 years.

3. **Onsite Superintendent/Foreman**.- The full-time, onsite superintendent/foreman responsible for supervising all the work onsite, including but not limited to, the excavation and subgrade preparation, the culvert, headwall, and wingwall installation, backfill operations, channel stabilization, and all other restoration processes, shall have supervised a minimum of 3 projects of this size and complexity in the past 7 years.

CONTRACTOR QUALIFICATIONS

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
CONTRACTOR QUALIFICATIONS

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1. Precast Box Culvert, Headwall, and Wingwall Construction References
(Must be completed and submitted with Bid for consideration)

List precast box culvert installation projects of culverts equal to or greater than 8 foot x 3 foot in size that including cast-in-place or precast headwalls and wingwalls, in the past 7 years and provide references. The Contractor shall have also worked a minimum of three projects in similar environmentally sensitive areas in the past 7 years.

Firm's Name: Hoffman Bros Inc
Role on Project: Prime Contractor

1.1. Client's Name: Gang of Lakes Intercounty Drain District
Address: 301 Green St Marshall, MI
Contact Name: Steve Roznowski (Spicer Group) Contact Phone: (734) 823-3308
Type of Work: 3 Precast box Culverts, 1 CMPA

Year Work Performed: 2020 & 2021 Work Amount (\$): 866,000.00

1.2. Client's Name: MDOT / City of Hillsdale
Address: 97 N Broad St Hillsdale, MI
Contact Name: Kristin Bayer Contact Phone: (517) 437-6479
Type of Work: Road Reconstruction w/
22' x 7' Box Culvert

Year Work Performed: 2020 & 2021 Work Amount (\$): 1,056,784.55

CONTRACTOR QUALIFICATIONS

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
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1.3. Client's Name: City of Lansing
 Address: 124 W Michigan Ave
 Contact Name: Alec Malvetis Contact Phone: 517 282 1356
 Type of Work: Utility Relocation for
7'x15' Aluminum Culvert

 Year Work Performed: 2021 Work Amount (\$): 755,028.09

1.4. Client's Name: _____
 Address: _____
 Contact Name: _____ Contact Phone: _____
 Type of Work: _____

 Year Work Performed: _____ Work Amount (\$): _____

1.5. Client's Name: _____
 Address: _____
 Contact Name: _____ Contact Phone: _____
 Type of Work: _____

CITY OF ANN ARBOR
DETAILED SPECIFICATION
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Year Work Performed: _____ Work Amount (\$): _____

1.6. Client's Name: _____

Address: _____

Contact Name: _____ Contact Phone: _____

Type of Work: _____

Year Work Performed: _____ Work Amount (\$): _____

1.7. Client's Name: _____

Address: _____

Contact Name: _____ Contact Phone: _____

Type of Work: _____

Year Work Performed: _____ Work Amount (\$): _____

CONTRACTOR QUALIFICATIONS

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
CONTRACTOR QUALIFICATIONS

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2. Channel Stabilization References

(Must be completed and submitted with Bid for consideration)

List a minimum of 2 or 3 projects demonstrating proficiency in construction of in-stream channel stabilization of similar size and complexity of the types proposed in the past 7 years.

Firm's Name: Hoffman Bro's Inc

Role on Project: Prime

2.1. Client's Name: U of M

Address: 7071 Wolverine Tower

Contact Name: Tom Walterhouse Contact Phone: (734) 763-5565

Type of Work: W&S Erosion Repair w/ Plunge Pool in Creek

Year Work Performed: 2021 Work Amount (\$): 287,547.00

2.2. Client's Name: Ingham County Drain Commission

Address: _____

Contact Name: _____ Contact Phone: _____

Type of Work: Pond Construction RipRap Slope Stabilization & Energy dissipation, River Outfall Structures w/ Native Seeding

Year Work Performed: 2020 Work Amount (\$): 4,200,000.00

CONTRACTOR QUALIFICATIONS

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2.3. Client's Name: _____

Address: _____

Contact Name: _____ Contact Phone: _____

Type of Work: _____

Year Work Performed: _____ Work Amount (\$): _____

2.4. Client's Name: _____

Address: _____

Contact Name: _____ Contact Phone: _____

Type of Work: _____

Year Work Performed: _____ Work Amount (\$): _____

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3. Onsite Superintendent/Foreman
(Must be completed and submitted with Bid for consideration)

List name of onsite superintendent/foreman and list a minimum of 3 projects of similar size and complexity dealing with culvert installation and channel stabilization that they have supervised in the past 7 years and provide references.

Superintendent/Foreman Name: Tom Rizer

3.1. Client's Name: Alec Malvetis City of Lansing
Address: 124 W Michigan Ave Lansing MI
Contact Name: Alec Malvetis Contact Phone: 517 782 1356
Type of Work: Full Rd Reconstruct
Combined Sewer Separation

Year Work Performed: 2018-2020 Work Amount (\$): 14,500,000.00

3.2. Client's Name: Jackson National Life
Address: 634 Front Ave Grand Rapids MI
Contact Name: Joe Luther Contact Phone: 248 431 8154
Christman co
Type of Work: Site Development HQ

Year Work Performed: 2014-2016 Work Amount (\$): 15,000,000.00

CONTRACTOR QUALIFICATIONS

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3.3. Client's Name: _____

Address: _____

Contact Name: _____ Contact Phone: _____

Type of Work: _____

Year Work Performed: _____ Work Amount (\$): _____

3.4. Client's Name: _____

Address: _____

Contact Name: _____ Contact Phone: _____

Type of Work: _____

Year Work Performed: _____ Work Amount (\$): _____

**DETAILED SPECIFICATION
FOR
ITEM #1 - PROJECT SUPERVISION, MAX \$10,000**

DESCRIPTION

The Contractor shall designate a full-time Project Supervisor to act as the Contractor's agent/representative, and to be responsible for scheduling and coordination of all subcontractors, suppliers, other governmental agencies, and all public and private utility companies.

The Project Supervisor shall not be an active crew member of the Contractor, shall not be an active member or employee of any subcontractor's work force, and shall not perform general or specialized labor tasks.

The Project Supervisor shall work exclusively on this project, and shall put forth his/her full effort into the organization and coordination of the work of this project.

Prior to the pre-construction meeting, the Contractor shall designate a proposed Project Supervisor by name, and shall furnish the City with a current, thorough, detailed summary of the proposed Project Supervisor's work history, outlining all previous supervisory experience on projects of a similar size and nature. The detailed work history shall include personal and professional references (names and phone numbers) of persons (previous owners or agents) who can attest to the qualifications and work history of the proposed Project Supervisor. Proposed candidates for Project Supervisor shall have a demonstrated ability to work harmoniously with the City, the public, subcontractors, and all other parties typically involved with work of this nature. The Supervising Professional will have the authority to reject a proposed Project Supervisor whom he/she considers unqualified.

The Project Supervisor shall be available 24 hours-per-day to provide proper supervision, coordination and scheduling of the project for the duration of the Contract. The Contractor shall furnish the City with telephone numbers of the Project Supervisor in order to provide 24 hour-per-day access during business and non-business hours, including weekends and holidays.

The Project Supervisor shall be equipped by the Contractor with a mobile telephone to provide the City with 24 hour-per-day access to him/her during daily construction activities, during transit to and from the construction site, and during all non-business hours including weekends and holidays.

The Project Supervisor shall be equipped with assistants as necessary to provide project supervision as specified herein, and in accordance with the Contract.

DUTIES AND RESPONSIBILITIES

The Project Supervisor work harmoniously with the City, the public, subcontractors, and all other parties typically involved with work of this nature.

The Project Supervisor shall have a thorough, detailed understanding and working knowledge of all construction practices and methods specified elsewhere herein, as well as the handling, placement, testing and inspection of aggregates, aggregate products, HMA concrete, and portland cement concrete materials.

The Project Supervisor shall be responsible for all of the work of all of the Contractor's, subcontractors' and suppliers' work forces.

The Project Supervisor shall be responsible for proper and adequate maintenance (emissions, safety, and general operation) of all of the Contractor's, subcontractors' and suppliers' equipment and vehicles.

The Project Supervisor shall be responsible for the legal, proper and safe parking/storage of all of the Contractor's,

subcontractors' and suppliers' equipment, work vehicles, and employee's vehicles.

The Project Supervisor shall schedule and coordinate the work of all parties involved in the project, including utility companies, testing agencies, governmental agencies, all City departments (such as Utilities and Transportation), and City inspectors.

The Project Supervisor shall coordinate and schedule the work of any independent survey crews that may be retained by the City to witness and reset existing and new geographic/benchmark monuments. Failure to have existing monuments witnessed and reset may result in delays to the Contractor's work. Costs for such delays will be the Contractor's sole responsibility.

The Project Supervisor shall coordinate and schedule both Testing inspectors and City inspectors in a timely manner, to assure proper and timely testing and inspection of the work.

The Project Supervisor shall review the Inspector's Daily Reports (IDRs) for accuracy, and shall sign all IDRs on a daily basis as the representative of the Contractor. Items to be reviewed include descriptions, locations and measurements of quantities of work performed, workforce, equipment, and weather. The Project Supervisor shall also be responsible for its subcontractors' review and initialing of IDRs containing work items performed by each respective subcontractors.

The Project Supervisor shall submit to the Engineer, an updated, detailed schedule of the proposed work on a weekly basis, and an update of all proposed changes on a daily basis, all in accordance with the Detailed Specification for Project Schedule contained elsewhere herein.

The Project Supervisor shall schedule and chair a weekly progress meeting with the Engineer and all subcontractors to discuss the work. Upon the completion of each meeting, the Project Supervisor shall prepare and distribute, to all present, a written summary of the meeting's minutes. Those in attendance shall review the minutes and, if necessary, comment on any deficiencies or errors prior to or at the next scheduled progress meeting.

ADDITIONAL PERFORMANCE REQUIREMENTS

If, in the sole opinion of the Supervising Professional, the Project Supervisor is not adequately performing the duties as outlined in this Detailed Specification, the following system of notices will be given to the contractor with the associated penalties:

- First Notice – A warning will be issued in writing to the contractor detailing the deficiencies in the Project Supervision. The contractor must respond within 7 calendar days in writing with a plan to correct the stated deficiencies. Failure to respond within 7 calendar days will result in the issuing of a second notice.
- Second Notice – A second warning will be issued in writing to the contractor further detailing the deficiencies in the Project Supervision. The contractor must respond within 7 calendar days in writing with a plan to correct the stated deficiencies. Failure to respond within 7 calendar days will result in the issuing of a third notice. A deduction of 10% will be made from the original Project Supervision contract amount. At this time, the City reserves the right to meet with personnel with the necessary authority within the Contractor's organization to discuss the deficiencies in the Project Supervision.
- Third Notice – An additional deduction of 25% will be made from the original Project Supervision contract amount, and the Project Supervisor shall be removed from the project, and replaced immediately with another individual to be approved by the Supervising Professional.

Should, in the sole opinion of the Supervising Professional, the Project Supervisor fail to perform his/her duties and responsibilities as described herein to such a degree that the successful completion of the project is put in jeopardy, the

above system of notices may be foregone, and the Contractor shall immediately replace the Project Supervisor upon receipt of written notice. Failure to provide adequate project supervision, as determined by the Engineer, shall be considered basis for the Supervising Professional to suspend work without extension of contract time or additional compensation.

MEASUREMENT AND PAYMENT

This item of work will be paid for on a pro rata basis at the time of each progress payment. Measurement will be based on the ratio between work completed during the payment period and the total contract amount. When all of the work of this Contract has been completed, the measurement of this item shall be 1.0 Lump Sum, minus any deductions incurred for inadequate performance as described herein. This amount will not be increased for any reason, including extensions of time, extras, and/or additional work.

The completed work as measured for this item of work will be paid for at the Contract Unit Price for the following Contract (Pay) Item:

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Project Supervision, Max 10,000	Lump Sum

The unit price for this item of work shall include all labor, material, and equipment costs to perform all the work specified in the Standard Specifications and as modified by this Detailed Specification.

**DETAILED SPECIFICATION
FOR
ITEM #2- GENERAL CONDITIONS, MAX \$20,000**

DESCRIPTION

This item shall include all work described and required by the Plans and Specifications for which no item of work is listed in the Bid Form, including but not limited to:

- Scheduling and organization of all work, subcontractors, suppliers, testing, inspection, surveying, and staking
- Coordination of, and cooperation with, other contractors, agencies, departments, and utilities
- Protection and maintenance of Utilities
- Placing, maintaining, and removing all soil erosion and sedimentation controls
- Maintaining drainage
- Maintaining drives, drive openings, sidewalks, bikepaths, mail deliveries, and solid waste/recycle pick-ups
- Storing all materials and equipment off lawn areas
- Temporary relocation and final replacement/re-setting of mailboxes
- Site clean-up
- Coordination efforts to furnish various HMA mixtures as directed by the Engineer
- Coordination efforts to furnish and operate various-size vehicles/equipment as directed by the Engineer
- Furnishing and operating vacuum-type street cleaning equipment
- Furnishing and operating vacuum-type utility structure cleaning equipment
- Furnishing and operating both vibratory plate and pneumatic-type (“pogo-stick”) compactors
- Furnishing and operating a backhoe during all work activities
- Furnishing and operating a jackhammer and air compressor during all work activities
- Noise and dust control
- Mobilization(s) and demobilization(s)
- Furnishing submittals and certifications for materials and supplies
- Parking meter bags
- Coordinating and cooperating with DDA and Republic Parking in installing electrical outlets on existing street lights and with removal/replacement of parking meters.
- Disposing of excavated materials and debris
- All miscellaneous and incidental items such as overhead, insurance, and permits.

MEASUREMENT AND PAYMENT

This item of work will be paid for on a pro rata basis at the time of each progress payment. Measurement will be based on the ratio between work completed during the payment period and the total contract amount. When all of the work of this Contract has been completed, the measurement of this item shall be 1.0 Lump Sum.

The completed work as measured for this item of work will be paid for at the Contract Unit Price for the following Contract (Pay) Item:

PAY ITEM

General Conditions, Max \$20,000

PAY UNIT

Lump Sum

The unit price for this item of work shall include all labor, material, and equipment costs to perform all the work specified in the Standard Specifications and as modified by this Detailed Specification.

**DETAILED SPECIFICATION
FOR
ITEM #3 – CERTIFIED PAYROLL COMPLIANCE AND REPORTING**

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DESCRIPTION

This specification covers all administrative requirements, payroll reporting procedures to be followed by Contractors performing work on City-sponsored public improvements projects, and all other miscellaneous and incidental costs associated with complying with the applicable sections of the City of Ann Arbor Code of Ordinances with regard to payment of prevailing wages and its Prevailing Wage Compliance policy.

This specification is not intended to include the actual labor costs associated with the payment of prevailing wages as required. Those costs should be properly incorporated in all other items of work bid.

GENERAL

The Contractor is expected to comply with all applicable sections of Federal and State prevailing wage laws, duly promulgated regulations, the City of Ann Arbor Code of Ordinances, and its Prevailing Wage Compliance Policy as defined within the contract documents. The Contractor shall provide the required certified payrolls, city-required declarations, and reports requested elsewhere in the contract documents within the timeline(s) stipulated therein.

The Contractor shall also provide corrected copies of any submitted documents that are found to contain errors, omissions, inconsistencies, or other defects that render the report invalid. The corrected copies shall be provided when requested by the Supervising Professional.

The Contractor shall also attend any required meetings as needed to fully discuss and ensure compliance with the contract requirements regarding prevailing wage compliance. The Contractor shall require all employees engaged in on-site work to participate in, provide the requested information to the extent practicable, and cooperate in the interview process. The City of Ann Arbor will provide the needed language interpreters in order to perform wage rate interviews or other field investigations as needed.

Certified Payrolls may be submitted on City-provided forms or forms used by the Contractor, as long as the Contractor's forms contain all required payroll information. If the Contractor elects to provide their own forms, the forms shall be approved by the Supervising Professional prior to the beginning of on-site work.

UNBALANCED BIDDING

The City of Ann Arbor will examine the submitted cost for this item of work prior to contract award. If the City determines, in its sole discretion, that the costs bid by the Contractor for complying with the contract requirements are not reasonable, accurately reported, or may contain discrepancies, the City reserves the right to request additional documentation that fully supports and justifies the price as bid. Should the submitted information not be determined to be reasonable or justify the costs, the City reserves the right to pursue award of the contract to the second low bidder without penalty or prejudice to any other remedies that it may have or may elect to exercise with respect to the original low-bidder.

The Contract Completion date will not be extended as a result of the City's investigation of the as-bid amount for this item of work, even if the anticipated contract award date must be adjusted. The only exception will be if the Contractor adequately demonstrates that their costs were appropriate and justifiable. If so, the City will adjust the contract completion date by the number of calendar days commensurate with the length of the investigation, if the published Notice to Proceed date of the work cannot be met. The contract unit prices for all other items of work will not be adjusted regardless of an adjustment of the contract completion date being made.

**DETAILED SPECIFICATION
FOR
ITEM #3 – CERTIFIED PAYROLL COMPLIANCE AND REPORTING**

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MEASUREMENT AND PAYMENT

The completed work as measured for this item of work will be paid for at the Contract Unit Price for the following Contract (Pay) Item:

PAY ITEM

PAY UNIT

Certified Payroll Compliance and Reporting

Lump Sum

The unit price for this item of work shall include all supervisory, accounting, administrative, and equipment costs needed to monitor and perform all work related to maintaining compliance with the tasks specified in this Detailed Specification, the City of Ann Arbor Code of Ordinances, its Prevailing Wage Compliance policy and the applicable Federal and State laws.

Payment for this work will be made with each progress payment, on a pro-rata basis, based on the percentage of construction completed. When all of the work of this contract has been completed, the measurement of this item shall be 1.0 times the Lump Sum bid amount. This amount will not be increased for any reason, including extensions of time, extra work, and/or adjustments to existing items of work.

**DETAILED SPECIFICATION
FOR
ITEM #4– ALLOWANCE FOR UNFORESEEN SITE CONTITIONS**

Allowance for unforeseen site conditions shall be paid under existing contract items where applicable, or under new item(s) at a negotiated price for work necessary for the completion of the project, but not expressly identified in the contract documents. Price paid shall be payment in full for all labor, material, and equipment required for remedying unforeseen physical conditions and shall be based upon an agreement negotiated and approved prior to beginning this Work.

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
GENERAL CONDITIONS, MAX. \$20,000

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a. General.- This item shall include all work described and required by the Drawings and specifications for which the item of work "General Conditions" is listed, as well as items of work not listed in the Bid Form including, but not limited to:

1. Scheduling and organization of all work, subcontractors, suppliers, testing, inspection, surveying, and staking;
2. Coordination of, and cooperation with, other contractors, appropriate City of Ann Arbor and University of Michigan agencies/departments, and utilities;
3. Protection and maintenance of utilities, including support, protection, capping, repair, replacement, connection or reconnection of existing pipelines, and utilities damaged by the Contractor's operations;
4. Protection of the features within Nichols Arboretum as described in Detailed Specification "Protection of Arboretum;"
5. Protection of wetlands as described in Detailed Specification "Protection of Wetlands," water courses and drainage ditches, and/or channels;
6. Dewatering and drainage of excavations as required to maintain a stable, open hole;
7. Disposing of excess excavated materials and debris (excluding debris material removed cleaning operations);
8. Maintaining drainage;
9. Maintaining trail and drive openings, sidewalks, bike paths, trails, and pedestrian access to and within Nichols Arboretum, unless otherwise noted. This includes the placement and maintenance of gravel in drive and trail openings as directed by the Engineer;
10. Storing all materials and equipment in locations indicated on the Drawings;
11. Temporary removal/relocation, storage, and re-installation/re-setting of miscellaneous features within Nichols Arboretum (benches, boulders, tables, etc.) which conflict with the proposed construction;

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DETAILED SPECIFICATION
FOR
GENERAL CONDITIONS, MAX. \$20,000

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12. Temporary removal/relocation, storage, and re-installation/re-setting of existing street name, guide, and regulatory signs, mailboxes, etc. which conflict with the proposed construction, including all fasteners, hardware, and materials required for re-installation/re-setting;

13. Furnishing and operating vacuum-type street cleaning equipment a minimum of once per week or as frequently as directed by the Engineer in order to remove mud, soil, rocks, debris, or any other deleterious materials from paved areas;

14. Noise and dust control;

15. Mobilization(s) and demobilization(s);

16. Furnishing submittals and certifications for all materials and supplies;

17. Removal of shrubs, brush, and trees less than 6 inches in diameter as directed by the Engineer;

18. All miscellaneous and incidental items such as overhead, insurance, and permits;

19. Meeting all requirements relating to Debarment Certification, Davis Bacon Act, and Disadvantaged Business Enterprise, and providing the necessary documentation.

b. Measurement and Payment.- This item of work will be paid for on a pro rata basis at the time of each progress payment. Measurement will be based on the ratio between work completed during the payment period and the total contract amount. When all of the work of this Contract has been completed, the measurement of this item shall be one Lump Sum, minus any deductions incurred for inadequate performance as described herein. This amount will not be increased for any reason, including extensions of time, extras, and/or additional work.

The completed work as measured for this item of work will be paid for at the contract unit price for the following contract pay item:

<u>Contract Pay Item</u>	<u>Pay Unit</u>
General Conditions, Max. \$20,000	Lump Sum

GENERAL CONDITIONS, MAX. \$20,000

**CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
GENERAL CONDITIONS, MAX. \$20,000**

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The unit price for this item of work shall include all labor, material, and equipment costs to perform all the work specified in the Contract Documents and as included in this Detailed Specification.

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
PROJECT SCOPE

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The scope of this project includes the removal and replacement of the existing culverts underneath Nichols Drive in the Arboretum with one 8-foot-wide by 3-foot-high concrete box culvert with new headwall and wingwalls, rebuilding the existing aggregate roadways, and regrading and stabilizing the channel upstream and downstream of the culvert including three plunge pools, a cascading rock channel with weir grade control, and a fieldstone spillway.

The limits of the project fall within the Nichols Arboretum (Arboretum). The Arboretum is jointly owned by the City of Ann Arbor and the University of Michigan. The Arboretum is comprised of various natural features, including botanical areas, significant trees and plants, steep slopes, as well as regulated wetlands. Contractor shall be sensitive to the environment, the patrons of the Arboretum, and the individual requirements of all property owners.

The major elements of the work covered by the Contract Documents under this Contract scope of work is as outlined below:

1. Remove one 30-inch-diameter Reinforced Concrete Pipe culvert and one 24-inch-diameter Vitrified Clay Pipe culvert.
2. Clear the surrounding brush and trees in conflict with the project.
3. Regrade the portion of stream channel immediately upstream and downstream of the existing culvert.
4. Excavate up to 10-feet below the proposed culvert to remove unsuitable soils material, backfill with approved granular material, and compact to reach a suitable bearing capacity.
5. Construct 8-foot-wide by 3-foot-high concrete box culvert, concrete headers, headwalls, and wingwalls.
6. Construct armored spillway, weir stabilization, and a cascading rock channel on the upstream side of the culvert.
7. Construct three plunge pools on the downstream side of the culvert.
8. Rebuild existing aggregate roadway, shoulders, and roadside drainage areas.
9. Restore all areas of disturbance as approved by Arboretum staff.

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
PROJECT SCHEDULE

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The entire work under this Contract shall be completed in accordance with, and subject to, the scheduling requirements as outlined below, in the milestone schedule, and all other requirements of the Contract Documents.

1. The Contractor is required to comply with and sign the Access Agreement established between the City of Ann Arbor and the University of Michigan. The Contractor's detailed Project Schedule must be completed and approved before the Access Agreement can be finalized. No work can proceed until the Access Agreement is completed.

2. The Contractor shall not begin the work of this project until receipt of the fully executed Contract and Notice-to-Proceed, which is not anticipated to be provided prior to November 1, 2021.

3. The entire work under this Contract including, but not limited to; culvert reconstruction, channel stabilization, road construction, the removal of any and all traffic control devices; and the installation/maintenance of the needed temporary soil erosion and sedimentation control devices, shall be completed by the Substantial Completion date of March 31, 2022.

4. Final restoration within the project limits and any other disturbed areas shall be completed by the Final Completion date, as described in Detailed Specification "Project Clean-Up and Restoration, Special," and as indicated on the Drawings.

Failure to complete the work as required herein, including approved time extensions granted thereto, as determined by the Engineer, shall entitle the City to deduct from the monies due to the Contractor, "Liquidated Damages", and not as a penalty, an amount, as provided for by the Contract in Subsection C, Article III, Page C-1 of the Contract Documents and defined herein.

The Contractor shall be furnished with 2 copies of the Contract, for their execution, on or about October 19, 2021. The Contractor shall properly execute both copies of the Contract and return them, with the required Bonds and Insurance Certificates, to the City within 10 calendar days. The Contractor shall not begin the work before the applicable date(s) as described herein without approval from the Engineer, and in no case before receipt of the fully executed Contract. City Council approval is expected on or about October 18, 2021.

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DETAILED SPECIFICATION
FOR
PROJECT SCHEDULE

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Time is of the essence in the performance of the work of this contract. The Contractor is expected to mobilize sufficient personnel and equipment and work throughout all authorized hours to complete the project within the specified time/date of this Contract and although work on Sundays is not anticipated, should the Contractor demonstrate that work must occur on Sundays in order to maintain the project schedule, they may do so between the hours of 9:00 a.m. and 5:00 p.m. with prior approval from the Engineer. The Contractor will submit authorization requests for any Sunday work a minimum of 3 working days in advance of the day of the proposed work. There will be no additional compensation due to the Contractor for work performed on Sundays.

Prior to the start of any construction, including mobilization and staging, the Contractor shall submit a detailed progress schedule of work for the Engineer's review and approval. Work shall not start until a schedule is approved in writing by the Engineer. The proposed schedule must fully comply with the scheduling requirements contained herein, and in other Detailed Specifications. The Contractor shall update the approved work schedule upon changes and upon request by the Engineer and present it to the Engineer within 7 days of said request or change.

The primary access to the site for the Contractor shall be along Nichols Drive from East Medical Center Drive through Lot M29 in accordance with the requirements and restrictions as described in Detailed Specification "Construction Sequencing." At no time shall the Contractor use any other entrance to the Nichols Arboretum for construction traffic entering or existing the site without getting written permission from the City.

The Engineer may delay or stop the work due to threatening weather conditions. The Contractor shall not be compensated for unused materials or downtime due to rain, snow or the threat of rain or snow beyond what is outlined in Detailed Specification "Working in the Rain." The Contractor is solely responsible for repairing all damages to the work and to the site, including steep slopes, road infrastructures, road subgrades, and any adjacent properties, which are caused as a result of working in the rain or snow.

The Contractor shall not work in the dark except as approved by the Engineer and only when lighting for night work is provided as detailed elsewhere in this contract. The Engineer may stop the work or may require the Contractor to defer certain work to another day, if, in the Engineer's opinion, the work cannot be completed within the remaining daylight hours, or if inadequate daylight is present to either properly perform or inspect the work. The Contractor will not be compensated for unused materials or

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DETAILED SPECIFICATION
FOR
PROJECT SCHEDULE

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downtime, when delays or work stoppages are directed by the Engineer for darkness and/or inadequate remaining daylight reasons. The Contractor is solely responsible for repairing all damages to the work and to the site, including steep slopes, road infrastructures, road subgrades, and any adjacent properties, which are caused as a result of working in the dark.

No work shall be performed, or lane closures permitted, during Christmas Eve and Christmas Day, and New Year's Eve and New Year's Day holiday periods, as defined by the Engineer.

The milestone schedule below indicates dates of intermediate and major project milestones based on an anticipated Notice to Proceed date of November 8, 2021.

Milestone Schedule	
<u>Milestone</u>	<u>Date</u>
Contractor Staging and Mobilization	January 10, 2021
Substantial Completion	March 31, 2022
Final Completion	May 13, 2022

During active construction time, the Contractor shall maintain one (1) lane of vehicle/pedestrian access through the work zone at all times to use for access to the arboretum. The Contractor shall be permitted, for a single duration of no more than two (2) weeks, to fully close Nichols Drive to all traffic while the culvert is being actively placed.

Failure to meet the timeline above and substantially complete all work as specified herein within the times specified herein, including time extensions granted thereto as determined by the Engineer, shall entitle the City to deduct from the payments due the Contractor, **\$1,550.00** in Liquidated Damages, and not as a penalty, for delays in the completion of the work for each and every calendar day beyond the Substantial Completion date as defined in this Detailed Specification.

If the Contractor fails to complete the work such that Final Completion cannot be granted by the date specified herein, including time extensions granted thereto as determined by the Engineer, it shall entitle the City to deduct from the payments due the Contractor, **\$750.00** in Liquidated Damages, and not as a penalty, for delays in the Final Completion of the work for each and every calendar day beyond the Final Completion date defined in this Detailed Specification.

**CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
PROJECT SCHEDULE**

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Liquidated Damages will be assessed until the required work is completed in the current construction season. If, with the Engineer's approval, work is extended beyond seasonal limitations, the assessment of Liquidated Damages will be discontinued until the work is resumed in the following construction season.

If the work required by this construction contract is not completed by the specified date(s) including any extensions of time granted thereto, at the sole discretion of the City of Ann Arbor, this Contract may be terminated with no additional compensation due to the Contractor, and the Contractor may be forbidden to bid on future City of Ann Arbor projects for a period of at least 3 years. If the Engineer elects to terminate the Contract, contract pay items paid for on a Lump Sum basis shall be paid up to a maximum percentage equal to the percentage of the contract work that has been completed.

CITY OF ANN ARBOR
 DETAILED SPECIFICATION
 FOR
UTILITIES COORDINATION

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The Contractor shall cooperate and coordinate construction activities with the owners of utilities as stated in Article 104.08 of the 2020 edition of the Michigan Department of Transportation (MDOT) Standard Specifications for Construction. In addition, for the protection of underground utilities, the Contractor shall follow the requirements in Article 107.12 of the 2020 edition of the MDOT Standard Specifications for Construction.

The following utility owners have facilities located within the rights-of-way surrounding the project or within Nichols Arboretum:

<u>Utility</u>	<u>Type of Service</u>
City of Ann Arbor W.R. Wheeler Center 4251 Stone School Road Ann Arbor, MI 48108 (734) 794-6350	Sanitary Sewer – Travis Conley Water – Daniel Wooden Storm Sewer – Kevin Snyder
City of Ann Arbor W.R. Wheeler Center 4251 Stone School Road Ann Arbor, MI 48108 (734) 794-6361	Signs/Signals/Street Lighting Chuck Fojtik
AT&T 550 South Maple, 2 nd Floor Ann Arbor, MI 48103 (734) 996-2135	Telephone/Fiber Optic
DTE Energy Contact: Julie Gottardi Western Wayne Service Center 8001 Haggerty Road Belleville, MI 48111 (734) 397-4303	Electric
DTE Energy (Michcon) Contact: Laurie Forrester 3150 East Michigan Avenue Ypsilanti Twp, MI 48198 (313) 389-7261	Gas

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DETAILED SPECIFICATION
FOR
UTILITIES COORDINATION

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For protection of underground utilities, the Contractor shall call "MISS DIG" toll free at 1-800-482-7171 or call 811 a minimum of 3 working days prior to excavation within the project limits. The Contractor must also notify utility owners who may not be part of the "MISS DIG" system.

The Contractor shall also contact and notify the University of Michigan to locate and mark their utilities that may exist within the project limits.

The Contractor shall notify the City of Ann Arbor a minimum of 3 days prior to beginning construction.

The owners of public or private utilities which will not interfere with the completed project and which do not present a hazard to the public or an extraordinary hazard to the Contractor's operations will not be required to move their facilities on or from the street right-of-way or project limits.

Work By Others.- During the life of this contract, other public authorities and utility companies may be performing work within or adjacent to the project limits, including, but not limited to; construction of adjacent projects, underground utility work, permanent signing and traffic signals work, traffic control improvements, street maintenance and snow removal, etc. The Contractor shall cooperate and coordinate construction activities with these agencies in accordance with Article 104.08 of the 2020 edition of the MDOT Standard Specifications for Construction.

Existing Utilities, Site Features, and Investigations.- The existing utilities structures, features, and site conditions above and underground are indicated on the Drawings from the best available information. These include, but are not limited to; pipelines, conduits, and the like.

It is the Contractor's sole responsibility to perform their own site investigations and research and to incorporate in their bid sufficient amounts for all utilities coordination work.

If any utilities, structures, features, and/or site conditions are discovered or suspected by the Contractor to be different than indicated on the Drawings, the Contractor is obligated to notify the Engineer immediately in writing so an addendum may be issued and/or the bid date may be revised.

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
UTILITIES COORDINATION

Fishbeck:PJK

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Agreements, permits, reports, and other investigations and information utilized in the development of the project are available for review by prospective bidders prior to submittal of their bid. Making this information available for review does not relieve the Contractor from the responsibility of performing their own site investigations, and the Contractor is responsible for any and all conclusions that are drawn from this data.

Electronic copies of the full versions of the available project documents can be obtained by contacting:

City of Ann Arbor
Public Services Area - Project Management Services Unit
301 East Huron Street; P.O. Box 8647
Ann Arbor, MI 48107-8647

Brian Slizewski, PE
Senior Project Manager
(734) 794-6410 ext. 43635
BSlizewski@a2gov.org
8:00 a.m. to 5:00 p.m. (only)

The Contractor's submittal of a bid shall be considered prima facie evidence that they have reviewed all available information and performed all needed investigations and that their bid contains the needed resources to complete the project for the lump sum and unit prices contained herein.

Reference the Detailed Specification for "Extension of Time, Additional Compensation" for provisions regarding delays.

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
PERMITS

Fishbeck:PJK

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a. General.- The Contractor shall secure all permits required by the agency having jurisdiction, shall abide by all rules and regulations of each, and shall pay all costs in connection with the permits. The Contractor shall pay for all permit and inspection fees as the agencies may charge to ensure compliance with their requirements, unless stated otherwise herein. The Contractor shall not be reimbursed for permit, inspection fees, retainage, bonds, or any other associated permit costs. These amounts shall be included in the item of work for “General Conditions.” City of Ann Arbor (City) Lane Closure permits, “No Parking” signs permits, and Right-of-Way permits shall be secured as required under Section 9 of “General Conditions.”

The Contractor shall be aware that permits must be submitted with the name of the Prime Contractor as the Designated Agent. The City will waive the fees for City issued permits. The Contractor shall coordinate with and complete all necessary paperwork for the respective City Units for the procurement of the needed permits.

All costs associated with coordinating with the City to obtain the permits will not be paid for separately.

b. City of Ann Arbor Grading/Soil Erosion and Sedimentation Control (SESC) Permit.- The Contractor shall obtain a City of Ann Arbor Grading/SESC Permit prior to beginning any work on this project. A copy of the permit application is included for the Contractor’s information and to complete and submit along with the SESC plans in the Drawings.

c. University of Michigan Access Agreement.- University of Michigan permits for OSEH storm water and soil erosion are not required for this project. The Access Agreement established between U of M and the City delegates all responsibility for these items to the City, as well as other constraints. A copy of the agreement from the last project performed in the Arboretum is attached to the end of this section as an example. The Contractor must submit the approved construction schedule to U of M via the City in order to finalize the agreement. The Contractor is required to sign and comply with the finalized agreement.



City of Ann Arbor
PLANNING & DEVELOPMENT SERVICES — BUILDING DIVISION

301 East Huron Street | P.O. Box 8647 | Ann Arbor, Michigan 48107-8647
 p. 734.794.6263 | f. 734.994.8460 | pstephens@a2gov.org

**GRADING/SOIL EROSION AND SEDIMENTATION
 CONTROL PERMIT APPLICATION**

Part 91 of Act No. 451 of Public Acts of 1994 as amended, being Section 324.9101 - 324.9123
 of Michigan Compiled Laws and Title V, Chapter 63, City of Ann Arbor Ordinance Code

Permission is requested by the Property Owner and designated agent to perform work as
 described below and on the reverse side, and as shown on the attached plans.

YOU *MUST* FILL IN ALL FIELDS

PROPERTY	<i>Address</i>	<i>Tax ID No.</i>	<i>Lot #</i>
	<i>Between</i>	<i>And</i>	
PROPERTY OWNER	<i>Name</i>	<i>Ph</i>	<i>Fax</i>
	<i>Address</i>		
CONTRACTOR/ DESIGNATED AGENT	<i>Last Name/Business</i>	<i>Ph</i>	<i>Fax</i>
	<i>Address</i>	<i>City</i>	<i>License No. Exp.</i>
ARCHITECT/ ENGINEER	<i>Name</i>	<i>Ph</i>	<i>Fax</i>
	<i>Address</i>	<i>License No.</i>	
PROJECT INFORMATION/NAME:			
TYPE OF WORK			
<input type="checkbox"/> Build/Finish <input type="checkbox"/> Addition(s) to <input type="checkbox"/> Alteration(s) to <input type="checkbox"/> Demolition/Cleaning <input type="checkbox"/> Move <input type="checkbox"/> Repair(s) to <input type="checkbox"/> Replacement of <input type="checkbox"/> Other _____	<input type="checkbox"/> New <input type="checkbox"/> Existing <input type="checkbox"/> Portion(s) of existing <input type="checkbox"/> Foundation only <input type="checkbox"/> Other _____ _____ _____	<input type="checkbox"/> Single Family Residence <input type="checkbox"/> Garage <input type="checkbox"/> Driveway <input type="checkbox"/> Multiple Structure Development <input type="checkbox"/> Commercial <input type="checkbox"/> Utility <input type="checkbox"/> Public Facility <input type="checkbox"/> Other _____	

You ***MUST*** submit ***TWO (2)*** copies of plans.

FLOODPLAIN/WETLAND

Name of and distance to nearest lake, stream or drain: _____

Does project require MDEQ Permit? Yes No DEQ Permit # _____

DESCRIPTION OF WORK _____

ON-SITE CONTACT:

NAME: _____ Company Name _____

ADDRESS: _____ PHONE: (_____) _____

Total Area of Parcel (In Acres): _____ E-MAIL: _____

Total Area of Proposed Earth Disruption (Nearest 1/10th of an acre): _____

2 COPIES OF THE GRADING PLAN MUST ACCOMPANY THIS APPLICATION. Please verify that all of the following information required is included on the grading plan:

For Projects on One Single Family Parcel or Lot:

- The scale of the grading plan. (Not to exceed 1"= 50'.)
 A description of the soil types of the exposed land area contemplated for the earth change.
 All natural features (landmark trees, wetlands, floodplains, woodlands, steep slopes, etc.) within 50 feet of proposed disturbance; and watercourses or lakes within 500 feet of the proposed disturbance.
 All existing and proposed structures are shown on the plan (differentiate between the two).
The physical limits of each proposed earth change including any areas that will be disturbed.
 Existing and proposed grade changes (differentiate between the two) using contour lines or accurate slope descriptions.
 Arrows indicating existing and proposed (differentiate between the two) water runoff patterns.
 A description and the location of all proposed temporary and permanent soil erosion and sediment control measures necessary to prevent offsite sedimentation.

FOR NEW HOUSE CONSTRUCTION ONLY, the following relative spot elevations are shown:

- First floor elevation.
 Lowest floor (basement) elevation for a walkout.
 A spot elevation of the street in front of the structure.
 High and low spot elevations on the lot (existing and proposed)

Proposed Construction Sequence (month/year)*:

- Project start date: ____ / ____
Gravel drive or mud mat installed: ____ / ____
Erosion control measures installed (erosion control inspection): ____ / ____
Land clearing: ____ / ____
Excavation started: ____ / ____
Stormwater Management Sys. installed: ____ / ____
Utilities constructed: ____ / ____
Roads constructed: ____ / ____
Pre-footing inspection: ____ / ____
Install foundation: ____ / ____
Final grading/ seeding: ____ / ____
Permanent erosion controls installed: ____ / ____
Temporary erosion controls removed1 : ____ / ____
Project complete (final inspection)2 : ____ / ____

* Please note that all of the items may not applicable to all jobs. If this is the case, simply indicate N/A.

1 Temporary erosion controls cannot be removed until the site is stabilized.

2 Site must be stabilized with permanent measures prior to scheduling of the final inspection.

NOTE:

- 1. Earth disruption may not commence prior to issuance of Grading/Soil Erosion and Sedimentation Control permit.
2. If project involves work within a floodplain, wetland, or cross section of a lake or stream, you must obtain an MDEQ permit prior to issuance of this permit.
3. Permittee is cautioned that grade changes resulting in the impoundment of water or increased runoff onto adjacent property is subject to civil damage litigation.

The Property Owner's signature is required either as the sole permit holder or to authorize the contractor to be the designated agent.

Permit holder will be:

- Property Owner
- Contractor / Designated Agent

(NOTE: Contractor is NOT allowed to act as a designated agent if Contractor is in non-compliance status on other permits.)

I (we) affirm that the above information is accurate and that I (we) will conduct the above described earth change in accordance with Part 91, Soil Erosion and Sedimentation Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, Chapter 63 of the Ann Arbor Ordinance Code, the documents accompanying this application, and with all terms and conditions of the permit as it may be issued, and agree to pay all fees and costs that may come due as a result of any activity under the permit.

Property Owner's Signature

Print Name

Date

OR

I (we), the Property Owner, authorize the Contractor identified on this application to be my Designated Agent and to secure a grading permit on my behalf.

Property Owner's Signature

Print Name

Date

I (we) affirm that the above information is accurate and that I (we) will conduct the above described earth change in accordance with Part 91, Soil Erosion and Sedimentation Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, Chapter 63 of the Ann Arbor Ordinance Code, the documents accompanying this application, and with all terms and conditions of the permit as it may be issued, and agree to pay all fees and costs that may come due as a result of any activity under the permit.

Designated Agent's Signature

Print Name

Date

OFFICE USE ONLY

GRADING NOTES: _____

Approved By: _____ Approval Date: _____

FEEES

Grading Permit \$ _____

Cash Bond: \$ _____

Inspection Escrow:

(Months of construction) x (\$100/ Month)

_____ X _____ = \$ _____

- Escrow must be collected at issuance of permit
- Designated agent is responsible for contacting city, for release of outstanding escrow, at completion of project

COORDINATION AND COOPERATION WITH OTHERS AND WORK BY OTHERS

**CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
COORDINATION AND COOPERATION WITH OTHERS AND WORK BY OTHERS**

Fishbeck:PJK

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a. General.- The Contractor is reminded of, and shall comply with, the requirements of Section 104.08 of the 2020 edition of the Michigan Department of Transportation (MDOT) Standard Specifications for Construction, "Cooperation by the Contractor."

The Contractor shall directly coordinate their work with individual City of Ann Arbor (City) Departments/Divisions/Units and appropriate University of Michigan (U of M) Departments.

No additional compensation will be paid to the Contractor, and no adjustments to contract unit prices will be made, due to delays and/or the failure of others in the performance of their work, nor for delays due to the encountering of existing utilities that are, or are not, shown on the Drawings.

Contractor shall coordinate with Utility Owners, in accordance with Detailed Specification "Utilities Coordination."

b. Owner/University of Michigan Occupancy During Construction.- The U of M Matthaei Botanical Gardens and Nichols Arboretum (MBGNA) Director and field staff will occupy and/or utilize the project site during the life of this contract for conducting normal maintenance and operations. Residents of the MBGNA Caretaker's House will utilize Nichols Drive for access. Once the Contractor's schedule is approved and Nichols Drive full closure timeframe is determined, the Contractor must give a minimum of four (4) weeks notice to the City and the MBGNA Caretaker's House for the timing of Nichols Drive closure. The City will work with the University to board the Caretaker's at a different residence during the full closure period.

The University of Michigan Hospital Complex will continue the use of Nichols Drive and Lot M29 for valet and permit parking as described in the Maintenance of Traffic (MOT) plans and elsewhere in the specifications.

The Contractor shall cooperate with the U of M departments to minimize conflict between their work operations and the day-to-day activities within Nichols Arboretum, the U of M Hospital Complex, and the surrounding area.

COORDINATION AND COOPERATION WITH OTHERS AND WORK BY OTHERS

**CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
COORDINATION AND COOPERATION WITH OTHERS AND WORK BY OTHERS**

Fishbeck:PJK

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8/9/2021

c. Access Agreement/Private Easements.- The City has obtained the necessary easements and access agreements required for construction within property owned by U of M. The Contractor shall conduct their operations in these areas in such a manner as to comply with the conditions set forth in said easement agreements. The Contractor shall limit their operations to the time of year, time of week, or time of day required on certain easements, as noted in the easements, agreements, and Contract Documents. Electronic copies of easements and access agreements are on file with the City and can be obtained by contacting:

City of Ann Arbor
Public Services Area - Project Management Services Unit
301 East Huron Street; P.O. Box 8647
Ann Arbor, Michigan 48107-8647

Brian Slizewski, PE
Senior Project Manager
(734) 794-6410 ext. 43607
BSlizewski@a2gov.org

8:00 a.m. to 5:00 p.m. (only)

Costs for complying with the requirements of this Detailed Specification, including the Contractor accomplishing all conditions noted in the easement and access agreements, will not be paid for separately, but shall be included in the bid price of the contract pay item "General Conditions."

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
CONSTRUCTION SEQUENCING

Fishbeck:PJK

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8/9/2021

a. General.- This Detailed Specification does not describe the full range of materials and processes needed to complete the work under this Contract. It is intended to indicate major project requirements and assist the Contractor in developing, for the review and approval of the Engineer, the Progress Schedule for the project. It is the Contractor's responsibility to review this sequence and all other supporting Drawings and Detailed Specifications to determine, on their own, prior to bid submittal, a detailed construction process that follows this sequence. If the Contractor determines they cannot perform the work in this sequence, as indicated in the Drawings and all other requirements indicated in the Contract Documents, they shall immediately present an alternative construction sequence and approach to the Engineer as part of their bid submittal. The alternative construction sequence will be subject to review and approval by the Engineer. No additional payment shall be provided to the Contractor due to changes to the construction sequence.

The Contractor is required to comply with and sign the Access Agreement established between the City of Ann Arbor and the University of Michigan. The Contractor's detailed Progress Schedule must be submitted to and approved by the Engineer and U of M before the agreement can be finalized. The agreement must be in place prior to the Preconstruction Meeting. The Engineer will review the Progress Schedule and ask for any needed revisions in order to bring the Progress Schedule into conformance with the Contract Documents. Unless an alternative sequence is requested by the Contractor, and approved in writing by the Engineer, the work shall be performed in the order as indicated on the Progress Schedule.

b. Sequence of Construction.- Unless an alternative sequence is requested in writing by the Contractor, and approved by the Engineer, the work shall be performed in the order described below. This sequence of construction is intended to maximize work progress while minimizing damage in, on, and around the working areas of the project.

Some of the work tasks listed below may be performed concurrently, at the discretion of the Contractor, and as approved by the Engineer. Additional sequencing requirements may be specified elsewhere within the Contract Documents and/or Drawings. The work to be performed includes, but is not limited to, the following:

1. Audiovisual recording of the entire project site as well as the intersection of East Medical Center Drive and Nichols Drive (Lot M29 Drive), the entire length of Nichols Drive and the parking lot (Lot M29), and the 721 N. Main Street City lot used for storage and mobilization, in accordance with Detailed Specification "Audiovisual Recording" and elsewhere in the Contract Documents.

**CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
CONSTRUCTION SEQUENCING**

Fishbeck:PJK

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8/9/2021

2. Implementation of the required temporary traffic control devices and trail closures in accordance with the Drawings, as detailed in the specifications, and as directed by the Engineer.

3. Implementation of soil erosion and sedimentation control (SESC) measures as indicated on the Drawings, as detailed in the specifications, and as directed by the Engineer. The Contractor shall install only those devices necessary to perform the work of the particular stage or to meet the appropriate federal, state, or local regulations.

4. Remove trees and brush necessary to allow for mass grading. If required, install the tree and wetland protection fencing and other construction fencing as indicated in the Drawings.

5. Remove existing headwalls, culverts, and excavate unsatisfactory soils. Backfill and install subgrade and subbase material, working with geotechnical consultant to ensure proper subgrade bearing pressure is met.

6. Install proposed culvert, as detailed in the plans and specifications, backfill, and at a minimum, create a temporary access path through the work zone for vehicles.

7. Installed headwalls and wingwalls, while maintaining access.

8. Install stream channel stabilization improvements including rock weir stabilization and plunge pools.

9. Complete final grading and add turf establishment, as required.

10. Perform clean-up and required restoration of the project site in accordance with the Drawings, as detailed in the specifications, and as directed by the Engineer.

11. Upon completion of the work, remove all temporary traffic control devices and SESC measures.

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
CONSTRUCTION SEQUENCING

Fishbeck:PJK

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8/9/2021

c. Work Restrictions.- The Contractor shall plan their work in accordance with the requirements and restrictions herein, as described in other relevant Detailed Specifications, as indicated on the Drawings, and as directed by the Engineer.

1. The primary Contractor access to the site shall be the site from East Medical Center Drive through Nichols Drive, and based on the following requirements:

A. The hours of work shall be as described in Detailed Specification “Hours of Work.”

B. The Contractor shall note that one side of Nichols Drive is used for valet and permit parking, and Lot M29 is used for permit parking, by the U of M Hospital Complex. U of M intends to maintain use of these parking spaces during construction; however, upon Contractor request, the final 3-5 spaces by the turnaround zone near the Nichols Drive entrance can be cleared for construction traffic turning movements. The Contractor shall limit the size of their trucks to those that can access Nichols Drive safely and not damage the parked vehicles. The cost of any damage to vehicles along Nichols Drive shall be the Contractor’s sole responsibility.

C. Should the Contractor or subcontractor work efforts require large trucks (intermediate or interstate semitrailers) which, in turn, would require the loss of the valet and permit parking spaces along Nichols Drive, the Contractor shall submit a request for clearing of the parking spaces to the Engineer and U of M, providing a minimum of 7 days advance notice. The approved clearing of the parking spaces along Nichols Drive shall be limited to the evening/overnight hours of 5:00 p.m. to 8:00 a.m. Monday through Sunday only. The request for parking space clearing shall be submitted as part of original progress schedule.

D. At no time shall the Contractor, it’s employees, or materials be allowed to use the parking spaces in Lot M29.

E. Contractor will be provided parking spaces for workers, material storage, and other construction activities at the City lot located at 721 N. Main Street, as shown in the plans. Contractor’s workers shall be limited to active work vehicles only along Nichols Drive and shall not allow employee parking along Nichols Drive. Contractor is required to shuttle or carpool personnel from 721 N. Main Street into the work area.

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
CONSTRUCTION SEQUENCING

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F. The Contractor must also be aware of the potential slope stabilization limitations along Nichols Drive, as indicated in the drawings. The first area of concern is along the northern curb line along Nichols Drive just after the E. Medical Center Drive intersection. The other is along the north side of the gravel portion of Nichols Drive leading into the work zone. The University and the City have had some slope stabilization issues with the slope down to the Huron River. The Contractor shall take care to favor the south side of the road with any large and oversized construction vehicles.

G. Any changes to the Contractor's progress schedule resulting in revisions to previously approved dates for access along Nichols Drive shall be submitted to the Engineer and provide a minimum of 5 working days' notice for re-approval from the Engineer and U of M.

2. The Contractor shall maintain vehicular access along Nichols Drive through the work zone within the Arboretum from the west gate at Lot M29 to the river landing to the east, in accordance with Detailed Specifications "Working Space" and "Maintenance of Traffic," as indicated on the Drawings, and as directed by the Engineer. No pedestrian access will remain through the work zone for the duration of the project. Proper signage must be placed to guide foot traffic away from the work zone.

3. The Contractor shall maintain emergency vehicular access along Nichols Drive and to the Caretaker's House at all times, except during the allowable closure while the culvert is being placed. In the event that work operations entirely block Nichols Drive, the Contractor shall be expected to cease or alter operations as required to accommodate emergency vehicular access to the Caretaker's House within 10 minutes of being notified of said emergency.

4. The Contractor shall at no time obstruct any part of East Medical Center Drive, unless as approved by the Engineer and U of M.

d. Lighting Requirements for Work.- Where work at night is requested and approved in advance by the Engineer, the night work shall be lighted to an average intensity of 10 foot-candles minimum. Sufficient light sources shall be provided to achieve this illumination requirement. The lighting shall allow the inspector to clearly see and inspect all work and operations. Lighting systems may be fixed, portable, or equipment mounted. A power source shall be supplied by the Contractor with sufficient

CITY OF ANN ARBOR
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capacity to operate the lighting system. The Engineer shall suspend all night work except for traffic control if lighting is inadequate on any nighttime work operation.

The lighting system should be directed at the work site only, shall be turned off when not needed, and shall not be left on overnight un-manned.

e. Measurement and Payment.- All costs for complying with the requirements of this Detailed Specification will not be paid for separately, but shall be included in the bid price of the affected items of work.

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
MAINTENANCE OF TRAFFIC

Fishbeck:PJK

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a. Description.- This work shall consist of protecting and maintaining vehicular and pedestrian traffic in accordance with Sections 104.11, 812, and 922 of the 2020 edition of the Michigan Department of Transportation (MDOT) Standard Specifications for Construction; Part 6 of the 2011 edition of the Michigan Manual of Uniform Traffic Control Devices (MMUTCD); and the City of Ann Arbor (City) Public Services Department Standard Specifications, except as modified herein.

The Contractor shall furnish, erect, maintain, and upon completion of the work, remove all traffic control devices within the project and around the perimeter of the project for the safety and protection of all traffic. This includes, but is not limited to; temporary advance, regulatory, and warning signs; barricades and channelizing devices at intersections, streets, and trails/pathways where traffic is to be maintained; barricades at the ends of the project, on trails/pathways, and at right-of-way lines of intersecting streets; and moving traffic control devices for construction operations.

b. Materials.- The materials and equipment shall meet the requirements specified in the sections designated above of the 2020 edition of the MDOT Standard Specifications for Construction, the 2011 MMUTCD, and all specification requirements contained in these Contract Documents.

All temporary traffic/pedestrian control devices furnished by the Contractor shall remain the property of the Contractor. The City shall not be responsible for stolen or damaged signs, barricades, barricade lights, or other traffic maintenance items. The Contractor shall replace missing traffic control devices immediately, at no additional cost to the City.

The Contractor shall furnish and operate Lighted Plastic Drums; Type III Barricades; and Type B Temporary Signs as directed by the Engineer.

Type III Barricades shall have standard orange-and-white stripes on both sides of the barricade.

"Road Work Ahead" warning signs shall be placed, as indicated on the Drawings or as directed by the Engineer, prior to the start of work, regardless of the nature, magnitude, or duration of the work.

c. Maintenance of Traffic - General.- The Contractor shall maintain traffic such that one (1) lane of traffic will be maintained through the work zone, for emergency and caretaker's access, for the duration of the project, except where noted. No pedestrians shall be able to enter active work zones or staging areas. This includes all Arboretum trails

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DETAILED SPECIFICATION
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and paths. The Contractor is responsible for placing pedestrian barricades and signage at the trailhead and each incoming trail junction to warn pedestrians of the closure. The Contractor will work with City and Arboretum staff to verify all paths have been properly signed prior to beginning work.

A two-week notice is required prior to beginning work on site. The Contractor will be permitted to narrow down Nichols Drive to a single lane to allow for vehicle and emergency access while performing work in preparation for and following the culvert installation. A single duration full closure of Nichols Drive, of no more than two weeks, will be permitted to allow for the Contractor to install the full length of the box culvert. A minimum notice of four weeks will be required to the Arboretum and City staff prior to the full closure.

Traffic control devices may remain staged for the entirety of the project, unless special closures area approved, in which those devices shall be removed at the agreed upon time. All traffic control devices must be removed upon completion of the work.

Two weeks prior to the start of any work the Contractor shall post a Construction Notification sign at the main (Lot M29) entrance to Nichols Arboretum. This is the only entrance available to the Contractor during the various stages of the work. None of the other three (3) entrances throughout the Arboretum shall be used by the Contractor without receiving prior written permission.

Public notification signage shall meet the following minimum requirements:

1. Signs shall be constructed of $\frac{3}{4}$ marine grade plywood.
2. Freestanding without the use of postholes.
3. Size shall vary based upon entrance location. For bidding purposes use 4 feet x 8 feet (sign will not exceed this size).
4. A drawing of each sign shall be submitted to the Engineer for approval. Minimum information on each sign shall include but not be limited to the following:
 - A. Project Name.
 - B. Project Owner (City of Ann Arbor).
 - C. Contractor Name.

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DETAILED SPECIFICATION
FOR
MAINTENANCE OF TRAFFIC

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- D. Emergency Contact Phone Number.
- E. Start Date.
- F. Estimated Completion Date.
- G. Special instructions/access restrictions at the specific entrance

5. In addition to the signs, the Contractor shall provide 11-inch x 17-inch laminated copies of the information on each sign for placement in informational kiosks.

6. In addition to the sign quantities on the plans, an additional quantity of 100 SFT of Temporary Signs has been added to the Contract to facilitate any additional required signage by the City, University, or Arboretum. Additional signs may include wayfinding signs for pedestrian traffic, additional advanced warning signs for Nichols Drive, and info signs throughout the area.

Caretaker Drive can only be accessed from Nichols Drive. Nichols Drive is used for valet parking, Arboretum guest parking, and access to Lot M29. Lot M29 shall remain open for the public, including U of M valet, and permit parking along Nichols Drive. The Contractor shall always maintain safe local vehicular and pedestrian access to Lot M29. Contractor's workers shall not use Nichols Drive or Lot M29 for parking personal vehicles. The City will provide personal vehicle parking for the Contractor's workforce at the 721 N Main Street parking lot. The Contractor will be required to carpool or shuttle personnel from this lot for any vehicles that are not considered active construction vehicles.

The Contractor shall limit use of the premises and maintain access to the public, the U of M Matthaei Botanical Gardens and Nichols Arboretum Director/Grounds Department, and emergency vehicles to the Caretaker's House, as described in Detailed Specification "Working Space."

Two weeks prior to beginning work inside the Arboretum, the Contractor shall place temporary construction fencing and/or barrels to establish the work zone. The work zone shall be reviewed by the Engineer and Arboretum staff. Any required revisions to the work zone based upon Engineer or Arboretum staff comments must be completed prior to the start of work. Work zones inside the Arboretum must be removed upon completion the work.

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
MAINTENANCE OF TRAFFIC

Fishbeck:PJK

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The Contractor shall coordinate with the City to obtain lane closure permits for anything outside of the work zone or as required by the City. Lane closure permits shall be obtained by the Contractor from the Project Management Services Unit at least 48 hours in advance of any proposed lane closing. The Contractor shall temporarily cover conflicting traffic and/or parking signs when directed by the Engineer with covers meeting the requirements of Section 812.03.D.2 of the 2020 edition of the MDOT Standard Specifications for Construction. All temporary traffic control devices associated with this closure shall be installed after 9:00 a.m. and removed before 3:30 p.m. of the same day.

During times that it may become necessary to temporarily obstruct local traffic on any of the local roads near the hospital to accommodate vehicle movement, the Contractor shall provide traffic regulator control in conformance with Chapter 6E, Sections 6E.01 through 6E.08, of the MMUTCD. A minimum of two traffic control regulators are required. The cost of traffic regulator control shall be included in the contract pay item "Minor Traf Devices, Modified."

The cost of the lane closure, including obtaining the permit, temporarily covering existing signs as directed, maintaining pedestrian traffic, and maintaining and relocating traffic control devices will not be paid for separately, but shall be deemed to be included in the cost of the item of work "Minor Traf Devices, Modified."

The Contractor shall coordinate their operations with all utilities, Contractors, and/or subcontractors performing work on this and other projects within, or adjacent to, the project site.

The hours of work shall be as defined in Detailed Specifications "Hours of Work," "Construction Sequencing," and "Project Schedule."

The Contractor shall use quantities of dust palliative and maintenance aggregate for use as temporary base, surfacing, and dust control at utility crossings, side roads, and driveways (wherever required to maintain traffic), and where directed by the Engineer to maintain local and emergency access. The cost for the use of dust palliative and maintenance aggregate, as required and directed by the Engineer for maintenance of traffic and local access, shall be included in contract pay item "General Conditions," and will not be paid for separately.

All traffic control devices shall be in place prior to beginning the work. The Contractor shall furnish, erect, maintain, and upon completion of the work, remove any

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DETAILED SPECIFICATION
FOR
MAINTENANCE OF TRAFFIC

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and all traffic control devices utilized on the project prior to final inspection and acceptance as described in Detailed Specification "Final Acceptance."

d. Measurement and Payment.- The completed work as measured for these items of work will be paid for at the contract unit price for the following contract pay items:

<u>Contract Pay Item</u>	<u>Pay Unit</u>
Minor Traf Devices, Modified.....	Lump Sum
Sign, Type B, Temp, Prismatic, Furn.....	SF
Sign, Type B, Temp, Prismatic, Oper.....	SF
Plastic Drum, High Intensity, Lighted, Furn.....	Each
Plastic Drum, High Intensity, Lighted, Oper.....	Each
Barricade, Type III, High Intensity, Lighted, Furn.....	Each
Barricade, Type III, High Intensity, Lighted, Oper.....	Each
Pedestrian Type II Barricade, Temp.....	Each

The unit price as bid for these items of work shall include all labor, material, and equipment costs to furnish, operate, and remove the items from the site when no longer needed as detailed herein.

The estimated quantities for maintaining traffic are based on the maintenance of traffic (MOT) plans. Any additional signing, traffic control devices, or the like, required to expedite the construction, or required given Contractor's change in staging, beyond that which is specified, shall be at the Contractor's sole expense.

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
AUDIOVISUAL RECORDING

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a. Description.- This work shall include providing a recording of the physical, structural, and aesthetic conditions of the construction site and adjacent areas as provided herein.

The audiovisual recording shall be:

1. Of professional quality, providing a clear and accurate audio and visual record of existing conditions.
2. Prepared during the 3-week period immediately prior to the Preconstruction Meeting.
3. Furnished to the Engineer a minimum of 2 weeks prior to bringing any materials or equipment within the areas described in this Detailed Specification.
4. Furnished to the Engineer either at, or prior to, the Preconstruction Meeting.
5. Carried out under the supervision of the Engineer.

The Contractor shall furnish 2 copies of the completed recording to the Engineer at, or prior to, the Preconstruction Meeting. An index of the recording, which will enable any area of the project to be easily found on the recording, shall be included. The Contractor shall retain a third copy of the recording for their own use.

Any portion of the recording determined by the Engineer to be unacceptable for the documentation of existing conditions shall be recorded again, at the Contractor's sole expense, and submitted to the Engineer prior to mobilizing onto the site.

b. Production.- The audiovisual recording shall be completed in accordance with the following minimum requirements:

1. **DVD Format/No Editing.-** The audiovisual recording shall be performed using equipment that allows audio and visual information to be recorded simultaneously and in color. The recording shall be provided on compact discs in DVD format or on a portable flash/hard drive. The quality of the recording shall be equal to or better than the standard in the industry. The recording shall not be edited.

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FOR
AUDIOVISUAL RECORDING

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2. **Perspective/Speed/Pan/Zoom.-** To ensure proper perspective, the distance from the ground to the camera lens shall not be less than 12 feet and the recording must proceed in the general direction of travel at a speed not to exceed 30 feet per minute (0.34 miles per hour). Pan and zoom rates shall be controlled sufficiently so that playback will ensure quality of the object viewed.

3. **Display.-** The recording equipment shall have transparent time and date stamp and digital annotation capabilities. The final copies of the recording shall continuously and simultaneously display the time (hours:minutes:seconds) and the date (month/date/year) in the upper left-hand corner of the frame. Accurate project stationing shall be included in the lower half of the frame in standard station format (i.e. 1+00). Below the stationing, periodic information is to be shown, including project name, name of area shown, direction of travel, viewing direction, etc.

On streets or in areas where there is no project stationing, assumed stationing shall be used, starting with 0+00 and progressing from west to east or from north to south.

4. **Audio Commentary/Visual Features.-** Locations relative to project limits and landmarks must be identified by both audio and video means at intervals no longer than 100 feet along the recording route. Additional audio commentary shall be provided as necessary during the recording to describe streets, buildings, landmarks, and other details, which will enhance the record of existing conditions.

5. **Visibility/Ground Cover.-** The recording shall be performed during a time of good visibility. The recording shall not be performed during periods of precipitation or when snow, leaves, or other natural debris obstruct the area being recorded.

c. Coverage.- The audiovisual recording coverage shall include the following:

1. **General Criteria.-** This general criteria shall apply to all recording and shall include all areas where construction activities will take place or where construction vehicles or equipment will be operated or parked, and/or where materials will be stored or through which they will be transported. The recording shall extend an additional 50 feet outside of all areas. The recording shall include all significant, existing man-made and natural features such as driveways, sidewalks, utility covers, utility markers, utility poles, other utility features, traffic signal structures and features, public signs, private signs, fences, landscaping, trees, shrubs, other vegetation, and other similar or significant features.

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DETAILED SPECIFICATION
FOR
AUDIOVISUAL RECORDING

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2. **Private Property.**- Record all private property that may be utilized by the Contractor in conjunction with this project. These project areas must be disclosed by the Contractor prior to using them for the work of this project.

3. **Road Construction Area.**- The recording coverage shall:

A. Extend to 50 feet outside of the right-of-way and easements area as indicated on the Drawings.

B. Extend 50 feet outside the construction limits on all streets, including side streets.

C. Both sides of each street shall be recorded

4. **Offsite Parking/Storage/Staging Area.**- The entire area of 721 N. Main Street shall be recorded as indicated in this Detailed Specification.

5. **Private Property Bordering the Project Limits or Work Areas.**- Record all areas bordering the project where work is scheduled to occur or where construction traffic could damage the private property, including along E. Medical Center Drive, the entire length of Nichols Drive, and Lot M29. This is to include buildings, hydrants, pavements, curbs, driveways, decks, landscaping, trees, and all other similar features.

6. **Other Areas.**- The Contractor shall record, at their sole expense, other areas where, in their opinion, the establishment of a record of existing conditions is warranted. The Contractor shall notify the Engineer in writing of such areas.

The Engineer may direct the recording of other minor areas not specified herein at the Contractor's sole expense.

d. **Measurement and Payment.**- The completed work shall be paid for at the contract unit price for the following contract pay item:

<u>Contract Pay Item</u>	<u>Pay Unit</u>
Audiovisual Recording	Lump Sum

Audiovisual Recording shall include all labor, equipment, and materials required to

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DETAILED SPECIFICATION
FOR
AUDIOVISUAL RECORDING**

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perform the recording and to provide the finished recording the Engineer.

Payment will be made for Audiovisual Recording following the review and acceptance of the recording by the Engineer. Within 21 days following the receipt of the recording, the Engineer will either accept it and authorize payment, or require that any discrepancies in the recording be addressed prior to making payment.

LAND MONUMENTS, PROPERTY CORNERS, AND MARKERS 107B

**CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
LAND MONUMENTS, PROPERTY CORNERS, AND MARKERS**

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It shall be the Contractor's responsibility to take all necessary precautions not to disturb, move, or destroy any land monuments, property corners, or markers delineating the boundaries of property along or near the work.

The Contractor shall notify the Engineer of any land monuments, property corners, or markers that will be affected by the construction in sufficient time so they may be properly protected or witnessed for later replacement by the Engineer.

Land monuments, property corners, or markers unnecessarily disturbed, moved, or destroyed by the Contractor shall be replaced by the City of Ann Arbor (City), in accordance with the requirements of the appropriate agency and Public Act. All costs associated with this replacement shall be charged to the Contractor.

The Contractor shall be aware that there are section corners and other City geodetic control points within or near the project boundaries. The re-setting of these points, if disturbed, will require significant cost and work to restore them to their current level of accuracy. Consequently, if they are disturbed or damaged, in the sole opinion of the Engineer, the City will re-set them to a condition equal to, or better than, that which currently exists. The Contractor will be backcharged for all costs incurred in re-establishing these points including, but not limited to, time charged to coordinate the work amongst all involved parties, expenses associated with "blue-booking" the points, and all other related costs.

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
HOURS OF WORK

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a. General Restrictions.- Hours of work shall be as stated in the Ann Arbor City Code Title IX, Chapter 119, Page 9.363, Monday through Saturday, between the hours of 7:00 a.m. and 8:00 p.m.

b. Exceptions.- During installation of the precast box culvert or other time sensitive items, the Contractor may choose, in some cases, to perform nighttime work to more easily facilitate construction. The Contractor shall include this work in their progress schedule, notify, and submit a request to the Engineer for permission to perform the nighttime work a minimum of 5 working days prior to beginning the work.

Additional work restrictions are contained in the Detailed Specifications for "Project Schedule," "Maintenance of Traffic," "Working Space," "Construction Sequencing," and elsewhere in the Contract Documents. These work restrictions shall take precedence over the General Restrictions and Exceptions listed above.

The Contractor shall only perform work at night or on Sundays as required by the Contract Documents, unless there is a special need and the work is approved by the Engineer. All requests to work during off-hours shall be included in the Contractor's progress schedule and submitted to the Engineer for approval a minimum of 5 working days prior to beginning the work.

c. Required Night Work.- None.

d. Noise Control.- All noise generated by construction activities shall not exceed 71 decibels (dBA) beyond the property line of the property on which the work is being conducted between 7:00 a.m. and 8:00 p.m., Monday through Saturday. The Contractor shall provide both primary and secondary screening, noise absorption, and level II sound attenuation as required on equipment to meet the noise limitations set herein. Any "off-hour" work will require a temporary exemption from both the City of Ann Arbor City Administrator and the University of Michigan Executive Vice President and Chief Financial Officer or the Executive Vice President's written designee. A temporary exemption may be granted in accordance with each respective entities' code of ordinance.

e. Method of Payment.- The costs of night work, whether required by the Contract Documents or requested by the Contractor, shall not be paid for separately, but shall be considered included in the cost of the affected contract pay items.

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
WORKER SAFETY AND SITE SECURITY

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8/9/2021

a. General.- The Contractor shall carry out their operations and secure the site in strict accordance with the requirements of Section 104.07 of the 2020 edition of the Michigan Department of Transportation (MDOT) Standard Specifications for Construction, "Contractor Obligations," all pertinent regulatory agencies, including, but not limited to, Occupational Safety and Health Administration (OSHA), Michigan Occupational Safety and Health Administration (MIOSHA), as well as all applicable manufacturer's safety requirements.

The Contractor hereby guarantees to the City of Ann Arbor (City) that all materials, supplies, and equipment as listed in the Contract Documents meet the requirements, specifications, and standards as provided for under the Michigan Occupational Safety and Health Act of 1976, as from time to time amended, and in force at the time of bidding this project, and all other applicable federal, state, and local ordinances, statutes, and laws.

The Contractor shall perform all work in accordance with the Construction Safety Standards as adopted by the Michigan Department of Labor Construction Safety Standards for Occupational Health adopted by reference and cross reference under authority of Sections 19 and 21 Act No. 154 of the Public Act of 1974, as amended, being 408.1021 of the Michigan Compiled Laws.

b. Safety Plan.- At the Preconstruction Meeting and prior to beginning any work, the Contractor shall submit a proposed Safety Plan to the Engineer detailing their safety plan and procedures and identifying all competent persons. The plan shall include a description of a daily safety program for the job site, their safety program for confined space entry in accordance with current OSHA and MIOSHA requirements, and all emergency procedures to be implemented in the event of a safety incident. All work shall be performed in accordance with the Contractor's submitted Safety Plan.

Prior to entry into any confined space, the Contractor shall submit to the Engineer a copy of their "daily" entry permit in accordance with current OSHA and MIOSHA requirements.

c. Safety Representative.- The Contractor shall designate a qualified and experienced safety representative at the site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs.

WORKER SAFETY AND SITE SECURITY

**CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
WORKER SAFETY AND SITE SECURITY**

Fishbeck:PJK

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d. Confined Space.- The Contractor shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the work including, but not limited to, confined space entry. The Contractor, including subcontractors, shall comply with all applicable laws and regulations and the City's safety programs, if any, relating to safety.

e. Trenches, Excavations, and Sanitary Structures.- During non-working hours, the Contractor shall properly secure any open trench, excavation, or sanitary structure with protective fencing and temporary cover(s). Temporary covers over sanitary chambers shall be capable of withstanding the weight of a human and other wildlife such as deer.

f. Measurement and Payment.- All costs associated with meeting the requirements of this Detailed Specification will not be paid for separately but shall be included in the bid prices for the affected items of work as indicated on the bid form and in the Contract Documents.

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
WORKING SPACE

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a. General.- The Contractor is reminded of, and shall comply with, the requirements of Section 104.08 of the 2020 edition of the Michigan Department of Transportation (MDOT) Standard Specifications for Construction, "Cooperation by the Contractor."

b. Access Agreement.- The City of Ann Arbor has previously established a draft Access Agreement with the University of Michigan for work within the Nichols Arboretum. If required, the agreement must be finalized before any work may proceed. The Contractor's Construction Sequence and Project Schedule must be submitted and approved before the agreement can be finalized. The Contractor must sign and comply with all of the requirements of the Access Agreement.

c. Contractor Use of Premises.- The Contractor shall limit construction traffic and access to areas indicated on the Maintenance of Traffic (MOT) Drawings, as specified in Detailed Specification "Maintenance of Traffic," as specified herein, and as directed by the Engineer.

The Contractor shall limit use of premises to allow the University of Michigan (U of M) Matthaei Botanical Gardens and Nichols Arboretum (MBGNA) Director and field staff the full use of Nichols Arboretum (Arboretum) and not obstruct access to the surrounding U of M Hospital Complex facilities or perform their work activities in such a manner as to impact existing vehicular parking along Nichols Drive or Lot M29. The Contractor shall limit use of premises to maintain public access in accordance with Detailed Specifications "Construction Sequencing," "Maintenance of Traffic," the MOT Drawings, as directed by the Engineer, and as described below:

1. Public Access

A. The Contractor shall maintain public pedestrian access along the stairs from East Medical Center Drive to Lot M29, to Caretaker's Drive, and other trails within the Arboretum at all times as indicated on the MOT Drawings.

B. The Contractor shall maintain vehicular access along Nichols Drive from East Medical Center Drive, throughout Lot M29, and along Nichols Drive from Lot M29 into and throughout the Arboretum at all times as indicated on the MOT Drawings, except as listed below.

C. A single short duration full closure of Nichols Drive is permitted, as described in other sections of the Detailed Specifications. At all other times, single lane access must be maintained.

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
WORKING SPACE

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2. U of M

A. The Contractor shall maintain vehicular access along Nichols Drive through the Arboretum from the west gate entrance to the river and to Caretaker's Drive, except as indicated herein or in other detailed specifications..

B. The Contractor shall maintain vehicular access to the Caretaker's House via Caretaker's Drive at all times.

C. Pedestrian access through the work zone from the west gate to the river landing shall be prohibited at all times.

3. Emergency Vehicles to the Caretaker's House:

A. The Contractor shall maintain sufficient access for emergency vehicles along Nichols Drive and Caretaker's Drive to the Caretaker's House at all times, except as indicated herein or in other detailed specifications.

B. The Contractor shall cooperate with the snow removal efforts of U of M in maintaining Nichols Drive and Caretaker's Drive. If necessary, the Contractor shall coordinate their work with that of snow removal crews to ensure that snow removal occurs as scheduled.

C. During periods of work that may entirely block Nichols Drive, the Contractor shall be prepared to cease, or alter, operations as required to accommodate emergency vehicular access to the Caretaker's House within 10 minutes, or less, of being notified of said emergency.

4. The Contractor shall at no time obstruct any part of East Medical Center Drive, unless as approved by U of M.

5. The Contractor shall always maintain ingress/egress from the City lot located at 721 N. Main Street. The Contractor is allowed use of only the area specified by the City, and shall not prohibit everyday operations at the lot.

6. Limit work zones, staging areas, and parking for construction vehicles to areas as indicated on the Drawings.

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
WORKING SPACE

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7. Where the Contract Documents identify certain site elements within the construction limits, such as sidewalks, drives, and trails that must be kept open for the public or the City's use during construction, the Contractor shall be responsible for protection and maintenance of such elements as well.

d. Contractor Staging.- The Contractor shall stage equipment in and around the culvert work areas only. Staging will be limited to the Nichols Drive road surface only, presuming access can be maintained. Additional areas along Nichols Drive may be considered for Contractor staging upon written request to, and approval from, the Engineer. The Contractor shall be aware that lands to be used as a construction staging area within the project site are in short supply and, most probably, are not available. The Contractor shall be prepared to perform the work of this project without an owner-supplied, dedicated, construction staging area, except within the roadway and that of the area at 721 N. Main Street, or be prepared to obtain their own offsite construction staging area if necessary. The Contractor shall maintain emergency vehicle access through all work/staging areas as indicated on the Drawings and as described herein.

e. Materials Storage.- The Contractor may store materials in the work areas along the Nichols Drive road surface and in and around the culvert, City lot at 721 N. Main Street, or as indicated on the Drawings. The Contractor shall store materials in an orderly arrangement allowing maximum access and unimpeded drainage and traffic. Material storage shall at no time impede emergency vehicle access along Nichols Drive or Caretaker's Drive. The storage of hazardous materials onsite shall not occur without the express approval of the Engineer.

f. Work Zones/Areas.- The Contractor shall confine work areas to those indicated on the Drawings and as described herein.

1. The following areas are available for Contractor culvert operations:

A. Along Nichols Drive, the roadway area between the M29 parking lot and within 200 feet east of the existing culverts. The roadway area is limited to an area that does not prohibit nor impede the overland flow route or any other drainage, and also allows for vehicular access along Nichols Drive.

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DETAILED SPECIFICATION
FOR
WORKING SPACE

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g. Protection and Restoration.-

1. Protect trees and shrubs in the staging and storage areas as indicated on the Drawings.

2. The Contractor shall take care and protect, to the extent possible, sloped areas within the work zone and along the access routes.

3. Restore areas as described in Detailed Specification "Project Clean-Up and Restoration, Special."

4. Take all necessary measures to prevent spillage of fuel, oil, chemicals, and hazardous materials.

5. Provide secondary containment for diesel generators, equipment containing oil or grease, and storage of hazardous materials, in accordance with governing authorities or agencies.

6. In the case of any fuel, oil, chemical, or hazardous material spill, the Contractor shall notify the Engineer, U of M, and the Michigan Department of Environment, Great Lakes, and Energy (EGLE) Pollution Emergency Alerting System (PEAS) at (800) 292-4706. The Contractor shall be responsible for cleaning up the spill and remediating the site in accordance with EGLE requirements and as approved by the Engineer at no additional cost to the project.

7. Keep storage and work areas clean.

8. Do not allow accumulation of scrap, debris, waste material, and other items required for construction of the work.

h. Site.- The Contractor shall maintain the site in a neat and orderly condition, including keeping paved surfaces clean, meeting the approval of the Engineer and U of M representatives at all times.

The Contractor shall inspect the site daily, and more often if necessary, to ensure the site is maintained in a neat and orderly condition. The Contractor shall also inspect storage areas weekly, and more often if necessary, to ensure the storage areas are maintained in a neat and orderly condition.

**CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
WORKING SPACE**

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If the Contractor fails to correct unsatisfactory conditions within 24 hours after due notification, the Engineer may arrange for such work to be performed by other means at the Contractor's expense.

Costs for this work will not be paid for separately but shall be included in the bid price of the contract pay item "General Conditions."

**CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
WORKING IN THE RAIN**

Fishbeck:PJK

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8/9/2021

Portions of the work to be performed under this contract are weather sensitive. Contractor shall be responsible for coordinating and scheduling their work in anticipation of the weather.

The Contractor shall have in place measures to control runoff, from a storm event or snow melt, through the active work zone. Substantial flow through the work zone may occur in the case of a significant rainfall event. The Contractor shall review the flows listed in the Construction Plans.

The Contractor shall not be compensated for the time and/or effort spent removing the temporary flow diversion measures and/or lateral bypass pumping system or for unused materials or downtime caused as a result of a wet weather event. The Contractor is solely responsible for repairing all damage to the work and to the site, including road infrastructure, road subgrades, underground utilities, any adjacent properties, and the like, which are damaged as a result of working in the rain or working in areas that are wet from recent precipitation.

The only exception to the above is as indicated in Detailed Specification "Extension of Time, Additional Compensation."

The costs of complying with this requirement shall not be paid for separately, but shall be considered included in the cost of the affected contract pay items.

EXTENSION OF TIME, ADDITIONAL COMPENSATION 108A

**CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
EXTENSION OF TIME, ADDITIONAL COMPENSATION**

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The Contractor shall notify the Engineer of their intent to submit a claim for additional compensation or an extension of time in accordance with the requirements of Section 104.10 of the 2020 edition of the Michigan Department of Transportation (MDOT) Standard Specifications for Construction. Failure to do so may be a basis for not approving the request for additional compensation or extension of time. The notification will allow the Engineer an opportunity to influence, keep records, and monitor the work.

Extensions of time will not be authorized due to delays caused by, or stemming from, the weather for the period between November 14th and April 16th unless any of the following conditions are present:

1. Air temperature (as measured from a thermometer provided, maintained, and installed by the Contractor in a location on the worksite, as mutually agreed upon between the Contractor and the Engineer) is below 15°F for a period of time longer than 48 consecutive hours.
2. Accumulations of snow in excess of 12 inches occur in any 24-hour period.
3. Freezing rain in excess of 1/4-inch occur in any 24-hour period.

Should the abovementioned weather conditions occur, and the Contractor requests an extension of contract time, the time extension shall only be for the realized delay to the controlling work operation.

If delays resulting from air temperature, snow accumulation, and/or freezing rain occur and the Contractor has their flow control in place and operational, the Contractor shall still be responsible to continuously protect and maintain the flow through the work zone. Expenses related to maintaining flow control shall not be considered to be additional costs or extra expenses during an authorized extension of time due to these weather-related time extensions.

The Contractor shall anticipate underground utility complications arising from the proposed utility work, unknown and/or fragile utilities, and utilities requiring investigation and or relocation. These utilities may be shown on the Drawings, correctly or incorrectly, or not at all, and may delay a controlling operation.

Additional compensation is defined as additional work, extra work, upward unit price adjustments, payments for down time, and the like.

CITY OF ANN ARBOR
 DETAILED SPECIFICATION
 FOR
TREE REMOVAL

Fishbeck:PJK

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8/9/2021

a. Description.- This work shall consist of removal of designated trees required to complete the work. Except as otherwise specified herein, all work shall be performed in accordance with the City of Ann Arbor (City) Public Services Area Standard Specifications, and as directed by the Engineer.

The Contractor remove only those trees identified in the plans. Trees identified for removal that are indicated on the Drawings have been approved by the City, U of M, and/or Nichols Arboretum for removal. No additional trees shall be removed as part of this project without the written permission of both the Engineer and U of M. The Contractor shall be aware that the removal of additional trees to facilitate the work may not be allowed. Additionally, granting permission to remove additional trees may require substantial additional time for review of the request and/or the permission may not be granted. If the Contractor requests removal of additional trees and the permission is not granted, the Contractor shall perform the work without the removal of the trees at no additional cost to the project. Further, an extension of contract time will not be granted for the period of time from when the request was made until such time the request was either granted or denied.

The removal and disposal of trees greater than 6 inches in diameter shall be paid for as indicated below. The cutting, removal, and disposal of trees less than 6 inches in diameter, bushes, brush, or the trimming of trees will not be paid for separately and shall in included in the item of work "General Conditions."

b. Construction Methods.-

1. **Removal.-** Cut and fell trees in a manner so as not to damage surrounding areas, fences, features, and adjacent trees designated to remain. Grub and remove stumps and roots. Backfill all resulting holes or excavations with Engineer approved material and dispose of all debris before ending the day's work.

Burning of any removed materials is strictly prohibited.

All trees removed as part of the work completed for this project shall be removed from the property unless otherwise requested by the City, U of M, Nichols Arboretum, or private property owner. All wood requested by the City or the respective property owner shall be cut into logs approximately 10 feet in length and placed at a location onsite as designated by the Engineer.

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
TREE REMOVAL

Fishbeck:PJK

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8/9/2021

c. Measurement and Payment.- The completed work as measured will be paid for at the contract unit prices for the following contract pay items:

<u>Contract Pay Item</u>	<u>Pay Unit</u>
Tree, Rem, 6 inch to 18 inch	Each

The items of work listed above shall be paid for by the number of trees actually removed. The unit price for these items of work shall include all labor, material, and equipment costs to perform the work as detailed herein. It is the intent of this project that completion of the work be performed without any tree removal. This item is included for contingency use only.

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
PROTECTION OF UTILITIES

Fishbeck:PJK

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8/9/2021

a. General.- Damages to utilities by the Contractor's operations shall be repaired by the utility owner at the Contractor's expense.

Delays to the work due to utility repairs are the sole responsibility of the Contractor.

The Contractor shall keep construction debris out of utilities at all times. The Contractor shall be backcharged an amount of \$50.00 per day for each manhole/inlet/utility/sewer pipe that contains construction debris caused as a result of the Contractor's (including their subcontractor[s] and supplier[s]) work.

The Contractor is solely responsible for any damages to the utilities or abutting properties due to their work operations or construction debris.

The costs for complying with the requirements of the Detailed Specification will not be paid for separately, but shall be included in the bid price of the contract pay item "General Conditions."

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
PROTECTION OF ARBORETUM

Fishbeck:PJK

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a. Description.- This work shall consist of staging, gaining access to the site, and performing the work associated with the Contract while minimizing the impact on the existing environment and features within the Nichols Arboretum. Except as otherwise specified herein, all work shall be performed in accordance with the City of Ann Arbor (City) Public Services Area Standard Specifications, and as directed by the Engineer.

b. General.- Damage to the Nichols Arboretum by the Contractor's operation(s) or the operation(s) of the Contractor's subcontractor(s) or supplier(s) shall be repaired under the direction of the University of Michigan (U of M) and the City of Ann Arbor Natural Area Preservation Department. The required repairs may be performed by the U of M Matthaei Botanical Gardens and Nichols Arboretum (MBGNA) Grounds Department with all associated costs being charged directly to the Contractor. Payment of these charges is the Contractor's responsibility and shall not be paid for separately.

The Contractor's personnel or equipment shall not damage the existing vegetation along Nichols Drive, existing trails, or slopes. The Contractor will not be allowed to clear trees or brush to perform their work operations unless specifically indicated on the Drawings or approved by the U of M and the Engineer.

c. Protection of Trees.- Unless indicated for removal, all trees shall be preserved and protected. Any damage to trees or tree limbs, which is caused by the Contractor (or their designee[s]), regardless of height, shall be the Contractor's responsibility. The Contractor therefore assumes the condition of the trees and tree limbs in an "as-is" condition once the project begins.

The Contractor shall not trim or remove any trees without the approval of the U of M and the Engineer. This includes any trimming required for excavation, delivery, or access for equipment to the site. All costs shall be the responsibility of the Contractor.

d. Protection of Drives, Trails, and Slopes.- The Contractor is permitted to use the locations within Nichols Arboretum and other work areas as indicated on the Drawings and as described in Detailed Specification "Working Space." Other existing trails may not be used for foot traffic, unless otherwise approved by the Engineer.

Rubber tracked equipment up to 6 feet wide (i.e.: bobcat, mini excavator, etc.) and equipment up to 10 feet wide (i.e. compactor/excavator, loader, etc.) will be permitted on Nichols Drive, and in the areas designated as work or staging areas on the Drawings.

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PROTECTION OF ARBORETUM

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Any portion of Nichols Drive damaged by construction activities, including rutting from trucks, temporary pipe trenches, etc., shall be repaired in accordance with the aggregate drive detail on the Drawings and as approved by the Engineer.

Particular attention is directed to the north side of Nichols Drive, immediately north of the intersection of Nichols Drive and East Medical Center Drive. This location, referred to as "the Slope," is of great concern to U of M. As such, the contractor shall, to the extent practical, avoid driving construction vehicles on that section of road. The Contractor shall utilize flaggers as necessary to control traffic while utilizing the south side of the road. The other area of concern is along the north side of Nichols Drive between the west gate of the Arboretum entrance and the work zone. This area is also considered an area of concern, as the slope from Nichols Drive to the Huron River bank has shown some signs of instability and required corrective measures in previous years. The Contractor shall not park equipment or vehicles along the north side of Nichols Drive, and caution shall be taken when making deliveries of material.

The Contractor shall protect slopes and open areas within the Arboretum during construction operations to the extent possible. If, in the opinion of the Engineer, the existing slopes are too soft and construction equipment is causing rutting, the Contractor will be required to protect the slope from construction equipment with protection materials, or other means necessary, as approved by the Engineer. The Contractor will be required to maintain this protective material, including replacing defective, worn or broken materials, until the Engineer determines it is no longer needed and can be removed from the project. It is the Contractor's responsibility to remove and properly dispose of this material when it is no longer needed. It is the Contractor's responsibility to restore the trail to the satisfaction of the Engineer.

e. Protection of Arboretum.- Protect existing site features within the Arboretum. Any damage to features within the Arboretum, including, but not limited to, treated lumber and gravel pedestrian steps, benches, tables, monuments, boulders, lamp posts, stone bridge abutments, call boxes, amphitheater, etc., which is caused by the Contractor (or their designee[s]), shall be the Contractor's responsibility to restore or replace damaged features to a condition that is equal to, or better than, original condition as determined by the Engineer and/or parties having jurisdiction. The Contractor therefore assumes the condition of such features in an "as-is" condition once the project begins.

f. Material.- Slope and trail protection materials shall be temporary materials such as flotation mats, plates, planks, 3/4-inch plywood, or other similar materials as

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approved by the Engineer. The Contractor will not be allowed to place aggregate materials on the path to stabilize it.

g. Measurement and Payment.- All costs for complying with the requirements of this Detailed Specification will not be paid for separately but shall be included in the bid price of the contract pay item “General Conditions.”

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
PROTECTION OF WETLANDS

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8/9/2021

a. Description.- This work shall consist of protecting the wetlands located within Nichols Arboretum in accordance with Part 303 of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, and Chapter 60 of the City of Ann Arbor (City) Code of Ordinances: Wetlands Preservation Ordinance.

Any damage to wetlands, which is caused by the Contractor (or their designee[s]), shall be the Contractor's responsibility. The Contractor therefore assumes the condition of the wetlands in an "as-is" condition once the project begins. Damage to the wetlands by the Contractor's operation(s) or the operation(s) of the Contractor's subcontractor(s) or supplier(s) shall be repaired under the direction of the University of Michigan (U of M) and City. The required repairs may be performed by the U of M Matthaei Botanical Gardens and Nichols Arboretum (MBGNA) Grounds Department with all associated costs being charged directly to the Contractor. Payment of these charges is the Contractor's responsibility and shall not be paid for separately.

Wetlands shall be protected from erosion, turbidity, siltation, and contamination. Contractor shall not perform any of the following actions within wetland limits without a permit from the Michigan Department of Environment, Great Lakes, and Energy (EGLE) or without the approval of the City and U of M:

1. Deposit or permit the placing of fill material.
2. Excavate or remove soil or vegetation.
3. Construct, operate, or maintain any use or development.
4. Drain surface water, such as diverting water to another area via ditch, pump, or drain.
5. Direct water from an upland activity into a wetland.

All costs shall be the responsibility of the Contractor.

b. Delineation – A wetland delineation has not been performed for the project area. It is intention of this project to complete the work without impact to any wetland area. Should the Contractor determine that if any of the actions outlined above must be performed, the Engineer shall be notified immediately.

The Contractor may, at no cost to the Owner, arrange to have a wetland delineation performed. The delineation must be conducted in accordance with the 1987 Corps of Engineers Wetlands Delineation Manual and the Regional Supplements to the Corps of Engineers Wetland Delineation Manual. Data collected on the vegetation, soils, and

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hydrologic characteristics of the identified wetland area should be summarized on U.S. Army Corps of Engineers Wetland Determination Data Forms.

If the delineation determines the the work is located within a wetland area, the Contractor must obtain an EGLE/Army Corps of Engineers joint permit prior to performing the work within the delineated area.

c. Material.- Wetlands shall be protected as indicated on the Drawings using protective construction fence, silt fence, snow fence, or other similar materials as approved by the Engineer.

d. Measurement and Payment.- All costs for complying with the requirements of this Detailed Specification will not be paid for separately but shall be included in the bid price of the contract pay item “General Conditions.”

PROJECT CLEAN-UP AND RESTORATION, SPECIAL

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
PROJECT CLEAN-UP AND RESTORATION, SPECIAL

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a. Description.- This work consists of performing on-going clean-up, removing, and disposing of debris; including soil erosion control fences, protective fences, fallen timber, logs, brush, rocks, boulders, and any other rubbish generated from the Contractor’s operations within the project limits or areas impacted by their operations. The Contractor shall perform final restoration and establish the planting areas as described in this Detailed Specification, as indicated on the Drawings, and as directed by the Engineer.

The related work of salvaging the existing topsoil, stockpiling the existing topsoil, preparing the earth bed, re-spreading the topsoil, furnishing the seed mixtures, sowing the seed, furnishing, placing, and anchoring the mulch blanket shall conform to the requirements of this Detailed Specification and Section 816, Turf Establishment, of the 2020 edition of the Michigan Department of Transportation (MDOT) Standard Specifications for Construction.

b. Materials.- The materials shall meet the requirements specified in the 2020 edition of the MDOT Standard Specifications for Construction, except as specified herein:

1. Nichols Arboretum Lawn/Slope Areas.- The disturbed lawn and slope areas in the Nichols Arboretum shall be seeded with a low maintenance, drought resistant mixture. Use a seeding mixture that is composed of four or more species of perennial grass. Use only species and their cultivars or varieties which are guaranteed hardy for Michigan. Do not select grass species considered noxious or objectionable, such as Quack Grass, Smooth Brome, Orchard Grass, Reed Canary Grass, and others. Seed mixture must be approved by Arboretum staff.

A suggested formulation and suggested mix are indicated below:

Typical Formulation:

Hard fescue (<i>Festuca brevipila</i>)	25%
Sheep fescue (<i>Festuca ovina</i>)	25%
Chewings fescue (<i>Festuca rubra</i> var. <i>fallax</i>)	25%
Creeping red fescue (<i>Festuca rubra</i> var. <i>rubra</i>)	25%

PROJECT CLEAN-UP AND RESTORATION, SPECIAL

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Or, Eco-Turf Low Maintenance Fescue Mix, 5 pounds (Lb)/1,000 square foot (SF) seeding rate, prepared by:

Michigan Wildflower Farms
11770 Cutler Road
Portland, MI 48875
(517) 647-6010

2. **Mulch.-** Mulch seeded areas with the appropriate materials for the site conditions to promote germination and growth of seed and to mitigate soil erosion and sedimentation. Mulch blankets shall be high velocity straw mulch blankets as specified in the 2020 edition of the MDOT Standard Specifications for Construction, Section 917.14.B.1.b.

3. **Slope Stabilization Contingency.-** Upon determination of the final restored slopes of the banks above the stream bed, if the Engineer determines that the bank slopes are too steep to properly establish turf using conventional methods (seed, mulch blanket), the City and Engineer may decide to utilize a rip rap supported slope, with a top soil cap. All effort, material, and design shall be included in the contingency items listed in the contract Bid Items:

- A. Rip Rap, Plain [Contingency] : 100 syd
- B. Topsoil Surface, Furn, 4inch [Contingency] : 100 syd

The City reserves the right to use some, all, or none of the contingency amount of each item.

c. Construction.- Provide project cleanup as an ongoing operation. Perform project cleanup within the right-of-way, Nichols Arboretum, and any other areas impacted by the project work operations.

Fill all holes and ruts resulting from the work operations with Engineer-approved material. Compact and level all backfill materials and restore ruts and holes to the surrounding contour as directed by the Engineer. Restore areas of Nichols Drive to their original depth in accordance with the aggregate drive detail on the Drawings and as approved by the Engineer at no additional cost to the project.

Any paved roadways damaged by the Contractor's operations shall be repaired by the Contractor at no additional cost to the project. Contractor shall submit proposed pavement

PROJECT CLEAN-UP AND RESTORATION, SPECIAL

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repair details for review and approval by the Engineer.

Grade, re-spread existing topsoil, removing rocks over 2 inches in diameter, place additional topsoil (as needed), place permanent seeding and furnish, place, and anchor erosion control straw mulch blanket in all areas disturbed by the Contractor's operations. The Contractor shall be responsible for performing the permanent restoration of the roadways, stairs, and other areas as part of the work of this Detailed Specification.

Topsoil placement shall occur at the locations called for on the Drawings or as directed by the Engineer. Minimum topsoil thickness in restoration areas shall be 4 inches. The Contractor is not permitted to truck in additional topsoil. Only native topsoil shall be used within Nichols Arboretum.

Damage to seeded areas resulting from erosion shall be repaired by the Contractor at the Contractor's expense. Scattered bare spots in seeded areas will not be allowed over 3 percent of the area nor greater than 6- by 6-inch in size.

Clean existing culverts, ditches, depressions, or other areas that contain sediment or debris from the work operations.

Neatly fill any ruts or depressions resulting from removal of soil erosion control materials with existing materials after their removal. Maintenance of silt fencing and other soil erosion control materials until such time as they are no longer needed, then removal and proper disposal of them from the site, shall be included in the bid price for the related soil erosion control device.

The project site shall be left in a condition that is clean and free of all project-generated debris, in accordance with Detailed Specification "Final Acceptance" and to the satisfaction of the Engineer.

d. Maintenance and Acceptance.- In the lawn areas, it is the responsibility of the Contractor to establish a dense, vigorous, weed free lawn of permanent grasses, free from mounds and depressions, prior to final acceptance and payment of this project. Any portion of this seeded area that fails to show a uniform germination, shall be re-seeded. Such re-seeding shall be at the Contractor's expense and shall continue until a dense, vigorous, and weed free lawn is established as determined by the Arboretum staff.

PROJECT CLEAN-UP AND RESTORATION, SPECIAL

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PROJECT CLEAN-UP AND RESTORATION, SPECIAL

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The Contractor shall maintain lawn areas until they have been accepted by the Engineer. Lawn maintenance shall begin immediately after the grass seed is in place, and shall continue until final acceptance with the following requirements:

1. Lawn shall be protected and maintained by watering, mowing, and re-seeding as necessary, until the period of time when the final acceptance and payment is made. The maintenance includes, but is not limited to, watering, fertilizing, mowing, deposition of additional topsoil, re-seeding, and any other work as required to correct all settlement, erosion, germination, and establishment issues until the date of final acceptance of the lawn area by the Engineer.

2. Damage to seeded areas resulting from erosion shall be repaired by the Contractor at the Contractor's expense. Scattered bare spots in seeded areas will not be allowed over 3 percent of the area, nor greater than 6 inches by 6 inches in size.

When the above requirements have been fulfilled, the Engineer will accept the lawn.

e. Measurement and Payment.- The completed work as measured shall be paid at the contract unit price for the following contract pay items:

<u>Contract Pay Item</u>	<u>Pay Unit</u>
Project Clean-Up and Restoration, Special	Lump Sum
Seeding, Fescue Lawn Mixture	Lb

"Seeding, Fescue Lawn Mixture" will be measured in Lb based on seeding rate as indicated herein. This item will be paid for at the contract unit prices which shall be payment in full for all labor, materials, and equipment needed to accomplish this work as detailed herein.

After initial placement of the topsoil and seed mixture(s), 50 percent of the total quantity placed for each item will be certified for payment. The remaining 50 percent of the total quantities will be held by the Engineer until such time as all lawn areas have been established and accepted by the Engineer.

The lump sum price "Project Clean-up and Restoration Special" shall include the grading of the area to receive the topsoil, preparing the earth bed, and stockpiling, spreading, and raking the topsoil to provide a uniform surface free of large clods, lumps, rocks, brush, roots, or other deleterious materials, as determined by the Engineer, in order to ready the area(s) to receive the specified seed mixtures.

PROJECT CLEAN-UP AND RESTORATION, SPECIAL

**CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
PROJECT CLEAN-UP AND RESTORATION, SPECIAL**

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The lump sum price for “Project Clean-Up and Restoration, Special” shall include all remaining project clean-up and restoration work, including all labor, material, and equipment costs required to complete the work as specified herein.

After initial placement of the topsoil and seed mixture(s), 50 percent of the total quantity placed for each item will be certified for payment. The remaining 50 percent of the total quantities will be held by the Engineer until such time as all lawn areas have been established and accepted by the Engineer and Arboretum Staff.

CITY OF ANN ARBOR
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FINAL ACCEPTANCE

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a. General.- The Contractor shall conform to the requirements of Sections 104.07 and 109.07 of the 2020 edition of the Michigan Department of Transportation (MDOT) Standard Specifications for Construction, “Contractor Obligations” and “Final Inspection, Acceptance, and Final Payment,” respectively.

b. Partial Acceptance.- Upon completion of a portion of the work, the Contractor may request, in writing, partial acceptance of that portion of the work. Within 7 days of the Contractor’s written request, the Engineer will conduct an inspection to determine if the Contractor has satisfactorily completed that portion of the work in accordance with the contract.

Within 7 days of the inspection, the Engineer will provide written notice of either partial acceptance for that portion of the work, or an explanation for rejecting the Contractor’s request for partial acceptance. If the Engineer grants the partial acceptance, the Engineer will designate in writing what portion of the work is partially accepted and the effective date of the partial acceptance.

Should the Engineer consider that the portion of the work is not complete, the Engineer shall notify the Contractor in writing stating the reasons. The Contractor shall complete the work and send a second written notice to Engineer certifying the project, or designated portion of the project, is partially complete. The Engineer and City of Ann Arbor (City) will re-inspect the work.

Partial acceptance will relieve the Contractor of maintenance responsibility and third-party damage liability for the designated portion of the work. By relieving the Contractor of maintenance and third-party damage claims, the City does not relieve the Contractor of responsibility for defective work or damages caused by the Contractor’s operations. The Contractor shall not construe partial acceptance to be final inspection, final acceptance of any part of the work, or waiver of any legal rights specified under Section 107 of the 2020 edition of the MDOT Standard Specifications for Construction.

c. Delayed Acceptance.- Upon completion of contract work items designated for delayed acceptance, the Contractor must notify the Engineer, in writing, of the completion of the designated work. Within 7 days of the Contractor’s written request, the Engineer will conduct an inspection to determine if the Contractor has satisfactorily completed the designated portion of the work in accordance with the contract. Within 7 days of the inspection, the Engineer will notify the Contractor, in writing, of the date the delayed acceptance period begins.

**CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
FINAL ACCEPTANCE**

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Delayed acceptance will relieve the Contractor of maintenance responsibility and third-party damage liability for the designated portion of the work. By relieving the Contractor of maintenance and third-party damage claims, the City does not relieve the Contractor of responsibility for defective work or damages caused by the Contractor's operations. The Contractor shall not construe delayed acceptance to be final inspection, final acceptance of any part of the work, or waiver of any legal rights specified under Section 107 of the 2020 edition of the MDOT Standard Specifications for Construction.

d. Final Clean-Up.- Unless otherwise required in the Contract Documents, the cost of final clean-up is included in the contact unit price for the related items of work (contract pay items).

Before final acceptance, the Contractor must complete all of the following:

1. Remove the following from the project limits, unless otherwise required in the Contract Documents or directed by the Engineer:

- A. Unused and/or unneeded materials;
- B. Temporary aggregates;
- C. Temporary soil erosion and sedimentation control devices;
- D. Rubbish;
- E. Protective fencing;
- F. Temporary pipe and supports;
- G. Equipment;
- H. Temporary traffic control devices; and
- I. All other temporary construction items, equipment, and debris not specifically listed above.

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
FINAL ACCEPTANCE

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2. Restore areas occupied during the project in accordance with Detailed Specification "Project Clean-Up and Restoration, Special," and as determined by the Engineer.

3. Replace or repair damaged features.

4. Provide the Engineer with written certification that all property that was used or damaged during performance of the work, including property outside of the project limits, has been restored in accordance with the Contract Documents, and applicable local, state, and federal requirements.

5. Provide written certification that the project has been inspected in compliance with the Contract Documents, the work has been completed in accordance with the Contract Documents, including applicable testing in the presence of the Engineer.

6. Clean paved areas, including portions of Lot M29 and City lot at 721 N. Main Street within 5 working days before opening the pavement surface to traffic taking precautions so as not to produce airborne dust when cleaning pavement.

7. Rake clean other surfaces of the grounds.

e. Final Inspection.- The Engineer will conduct the final inspection within 7 days of receiving the Contractor's written notification that the work has been completed. The Contractor must attend the final inspection.

Within 7 days of the final inspection, the Engineer will provide written notice to the Contractor of a satisfactory final inspection or will provide a list of specific defects to be remedied in order to achieve a satisfactory final inspection.

Should the Engineer consider the work not complete and ready for final payment, the Engineer shall notify the Contractor in writing, stating the reasons. The Contractor shall take immediate steps to remedy the stated deficiencies and send a second written notice to the Engineer certifying that the work is complete. The Engineer will re-inspect the work.

Should the Engineer be required to perform additional re-inspections because of failure of the work to comply with the original certifications of the Contractor, the Engineer will deduct the cost of the re-inspections from the final amount to be paid to the Contractor.

CITY OF ANN ARBOR
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After achieving satisfactory final inspection, the Contractor is relieved of the duty of maintaining and protecting the project. In addition, the Contractor is relieved of their responsibility for third-party damage claims, and for damage to the work that may occur after satisfactory final inspection.

f. Final Acceptance.- Within 7 days of satisfactory final inspection and submission of all required project and materials testing documentation by the Contractor, the Engineer will give the Contractor written notification of final acceptance.

The Contractor, without prejudice to the terms of the contract, is liable to the City at any time, both before and after final acceptance, for latent defects, fraud, such gross mistakes as may amount to fraud, or actions affecting the City's rights under any warranty or guarantee.

g. Final Payment.- The Contractor shall submit a final Application for Payment in accordance with the requirements of the Contract Documents.

Within 30 calendar days after final acceptance, the Engineer will prepare a final estimate of work performed. The Contractor will have 30 calendar days from the issuance of the final estimate to file a claim or objections to the quantities within the final estimate. If no claim or objections are filed within 30 calendar days, the City will process the final estimate for approval and final payment. At that time, the Contractor will be furnished a copy of the approved final estimate.

1. The final payment will be made when the Contractor has provided the following:

- A. All reports or documents required by the Engineer.
- B. The Consent of Surety for payment of the final estimate.
- C. Signed Contractor's Declaration (see Section 43 of the "General Conditions").
- D. Satisfactory evidence by signed Contractor's Affidavit (see Section 44 of the "General Conditions") that all the indebtedness due to the contract has been fully paid or satisfactorily secured.

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FOR
FINAL ACCEPTANCE**

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The City can recover all overpayments from the Contractor in the final estimate.

PRECAST CONCRETE BOX CULVERTS 401

CITY OF ANN ARBOR
SPECIAL PROVISION
FOR
PRECAST CONCRETE BOX CULVERTS

FISHBECK: PJK

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8/9/2021

a. Description.- This work shall consist of constructing precast concrete box culverts in accordance with Section 406 of the Michigan Department of Transportation 2020 Standard Specifications for Construction, the City of Ann Arbor Public Services Area Standard Specifications, as shown on the plans and as specified herein.

b. Materials.- The materials used for this work shall confirm to Subsection 406.02 of the Michigan Department of Transportation 2020 Standard Specifications for Construction, and the City of Ann Arbor Public Services Area Standard Specifications.

c. Methods of Construction.- The construction methods used shall conform to Section 406.03 of the Michigan Department of Transportation 2020 Standard Specifications for Construction, the City of Ann Arbor Public Services Department Standard Specifications, and as specified herein.

Precast box culverts shall be designed to *HL-93 Live Load* requirements as determined by a Professional Engineer licensed by the State of Michigan, regardless of where they are to be installed.

The Contractor shall submit to the Engineer shop drawings in accordance with Section 406.03.C of the Michigan Department of Transportation 2020 Standard Specifications for Construction.

For each submittal or resubmittal, the Contractor shall allow at least 30 calendar days from the date of the submittal to receive the Engineer's acceptance or request for revisions. The Engineer's comments shall be incorporated into the submitted plans, calculations and descriptions. The Engineer's acceptance is required before beginning the work. Resubmittals may take less than 30 calendar days depending upon the magnitude of revisions requested. Required revisions will not be a basis of payment for additional compensation, extra work, or an extension of contract time. The Contractor shall include time for this entire review process in his/her CPM network schedule.

d. Measurement and Payment.- The completed work as measured shall be paid at the contract unit price for the following contract items (pay items):

PRECAST CONCRETE BOX CULVERTS 401
CITY OF ANN ARBOR
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FOR
PRECAST CONCRETE BOX CULVERTS

FISHBECK: PJK

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(Contract Item) Pay Item

Pay Unit

Culv, Precast Conc Box, (span) foot by (rise) foot, Modified.....Foot

“Culv, Precast Conc Box, (span) foot by (rise) foot, Modified” will be measured by length in feet. Payment for “Culv, Precast Conc Box, (span) foot by (rise) foot, Modified” includes all work required to design, manufacture, and install the precast elements. This contract item includes cold applied culvert joint sealer, closed-cell rubber extrusion type gaskets, geotextile pipe wrap for box culvert joints, and joint straps. This contract item also includes furnishing the labor, equipment, and materials for all necessary excavation, disposing of surplus excavated material, backfilling, pipe connections, and structure cleaning. Also included is the associated testing to determine proper bearing capacity.

Payment for “Culv, Precast Conc Box, (span) foot by (rise) foot, Modified” also includes all equipment, labor, and materials (including but not limited to grout, mortar, reinforcing steel, concrete, anchoring systems, and fiber expansion paper) required to design, manufacture, and install the culvert wingwall, cut-off wall, and headwall elements. This contract item includes furnishing the labor, equipment, and materials for all necessary excavation, disposing of surplus excavated material, backfilling, wall connections, and cleaning.

CITY OF ANN ARBOR
SPECIAL PROVISION
FOR
PLUNGE POOL

FISHBECK:CLP

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8/9/2021

a. Description. This work consists of providing all labor and equipment needed for furnishing, hauling, placing, shaping, and compacting rock for the plunge pool and armoring of channel bed downstream, as shown on drawings. Construct the plunge pool and armor channel bed as shown on the plans, or as directed by the Engineer. Ensure the rock is in accordance with sections 302 and 902 of the 2020 edition of the Michigan Department of Transportation (MDOT) Standard Specifications for Construction, except as called for herein. Excavation and removal of material shall be completed and paid for in accordance with sections 205 of the Standard Specifications for Construction.

b. Materials. Provide rock material for plunge pool and downstream channel bed that is sound, tough, and durable natural fieldstone. Rock dimension shall be 8-inch to 24-inch diameter. Footer rocks shall be 14-inch to 24-inch in diameter. Smaller stones may be used to fill voids.

c. Construction. Place the stone in accordance with section 902 of the Standard Specification for Construction and in accordance to the following:

- 1) Footer rocks shall be keyed into channel bed and bank no less than 1.5 feet.
- 2) Conform to slopes and dimensions indicated on the Plans or as directed by Engineer
- 3) Regrade and relay rock as necessary.

d. Performance Standards.

- 1) Unobstructed flow into and out of plunge pool and to Huron River.
- 2) Flows centralized and not directed at channel banks.
- 3) Channel bed in vicinity of work areas are free from depressions and/or sediment bars, greater than six tenths of a foot created during construction.

e. Measurement and Payment. The completed work, as described, will be measured and paid for at the contract unit price using the following pay item:

Pay Item	Pay Unit
Plunge Pool.....	Each

This pay item includes both the plunge pool and downstream channel bed armor. **Plunge Pool** will be measured by width, length, weir crest height and specified pool depths, as shown on the plans. Engineer will visually inspect structure to determine if plunge pool meets performance standards noted above. **Channel bed armor** will be measured by width and length specified on plans.

CITY OF ANN ARBOR
SPECIAL PROVISION
FOR
SLOPE STABILIZATION

FISHBECK:CLP

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8/9/2021

a. Description. This work consists of providing all labor and equipment needed for furnishing, hauling, placing, spreading, and shaping rock at the length, width, and depths specified on the plans. Construct the cascading rock channel, armored spillway, and stabilize the existing weir as shown on the plans, or as directed by the Engineer. Ensure the rock is in accordance with sections 813 and 916 of the Standard Specifications for Construction, except as called for herein. Excavation and removal of material associated with slope stabilization shall be completed and paid for in accordance with sections 205 of the Standard Specifications for Construction and within the Detailed Specifications.

b. Materials. Provide geotextile fabric and rock for slope stabilization as follows:

1) Geotextile Fabric:

- a. Type: Nonwoven.
- b. Meeting AASHTO M288 and ASTM testing requirements.
- c. Manufacturers: Propex, Geotext, TenCate, Mirafi, or equal.
- d. Physical Requirements Schedule:

	Heavy Riprap	Plain Riprap/ Cobblestone
Grab Tensile Strength (Min.), lbs. ASTM D 4632	270	200
Trapezoid Tear Strength (Min.), lbs. ASTM D 4533	100	75
Puncture Strength (Min.), lbs. ASTM D 4833	100	75
Mullen Burst Strength (Min.), lbs. ASTM D 3786	400	200
Permittivity Per Second, Sec. ASTM D 4491	0.5	0.5
Apparent Opening Size (Max.), mm ASTM D 4751	0.21	0.21
In accordance with MDOT Table 910-1		

- 2) **Rock:** Sound, tough, and durable natural fieldstone. Rock dimension shall be 8-inch to 36-inch diameter.
 - 1) Cascading Rock Channel: Footer Rocks: 24-inch to 36-inch diameter. Fill voids with smaller stone, as shown on plans.
 - 2) Weir Stabilization: Footer Rocks: 16-inch diameter with smaller stones to fill voids, as shown on plans.
 - 3) Armored Spillway: 8-inch to 16-inch diameter stones secured into larger stones of cascading rock channel, as shown on plans.

c. Construction. Place the geotextile fabric and stone in accordance with section 813 of the Standard Specification for Construction, and in accordance to the following:

- 1) Work shall be constructed in the following sequence:
 - a. Cascading Rock Channel
 - b. Weir stabilization
 - c. Armored spillway
- 2) Footer rocks shall be keyed into channel bed and bank minimum 1.5 feet, as shown on plans for both cascading rock channel and weir stabilization.
- 3) Footer rocks shall be keyed into channel bed a minimum of 4.0 feet at face (downstream side) of concrete weir and culvert invert (upstream side) to ensure no

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SPECIAL PROVISION
FOR
SLOPE STABILIZATION

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- scour, as shown on plans.
- 4) Smaller stones shall be chinked in place amongst larger to prevent dislodgement.
 - 5) Cascading Rock Channel:
 - a. Engineer shall measure depth of channel bed excavation prior to placement of geotextile and/or rock.
 - b. Place geotextile prior to riprap and secure against movement during placement of riprap.
 - c. Place riprap onto geotextile fabric without dumping or dropping in place.
 - d. After riprap is placed, anchor geotextile in a key trench at the top of channel side slopes 3 horizontal to 1 vertical or steeper. Backfill trench with soil or riprap.
 - e. Overlap geotextile at seams a minimum of 2 feet, with overlap in direction of flow.
 - f. Ensure flows are centralized and not directed at channel banks.
 - 6) Armored Spillway:
 - a. Construct after cascading rock channel has been constructed and inspected by Engineer.
 - b. Ensure flows are centralized and smooth transition to cascading rock channel.
 - 7) Weir Stabilization:
 - a. Exercise due diligence to protect existing concrete weir and sanitary sewer.
 - b. Ensure centralized, unobstructed, stable flow over weir to armored spillway and cascading rock channel.
 - 8) Conform to slopes and dimensions indicated on the plans or as directed by Engineer.
 - 9) Relay rock as necessary and as directed by Engineer.

d. Measurement and Payment. The completed work, as described, will be measured and paid for at the contract unit price using the following pay item:

Pay Item	Pay Unit
Cascading Rock Channel	Lump Sum
Armored Spillway	Lineal Foot
Weir Stabilization	Lump Sum

Cascading Rock Channel will be measured by width and length and weir crest height, as shown on the plans.

Armored Spillway will be measured by length and width, as shown on the plans.

Weir Stabilization will be measured by length, width, and depth of stone placed, as shown on the plans.

SUBGRADE UNDERCUTTING, MOD

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a. Description.- Perform subgrade undercutting in conformance with section 205 of the 2020 Michigan Department of Transportation Standard Specifications for Construction, except as modified herein.

b. Materials.- The materials used for this work shall conform to Subsection 406.02 of the Michigan Department of Transportation 2020 Standard Specifications for Construction as it relates to the subbase of the precast box culvert. Material used to replace undercut subgrade shall conform to that required for structural embankment, and as specified in the Detailed Specifications.

c. Construction.- Conform to subsection 205.03.E of the Standard Specifications for Construction. Include all types of excavation, including peat excavation, as outlined in section 205.03.C.

d. Measurement and Payment.- The completed work, as described, will be measured and paid for at the contract unit price using the following contract items (pay items):

Pay Item	Pay Unit
Subgrade Undercutting, Modified	Cubic Yard

Subgrade Undercutting, Modified will be paid for as detailed in subsection 205.04.E of the 2020 MDOT Standard Specifications for Construction for Subgrade Undercutting, and will include excavating peat, muck, marl, and very soft underlying clay. The unit price for Subgrade Undercutting, Modified will include the cost of rehandling waste material to facilitate displacement.

APPENDIX

Geotechnical Report - 31 pages
EGLE Permit - 15 pages
Pre-bid meeting sign-in - 2 pages
Plan sheet - 1 page



GEOTECHNICAL REPORT
SCHOOLGIRL'S GLEN - NICHOLS DRIVE CULVERT REPLACEMENT
ANN ARBOR, MICHIGAN

Prepared For:

FISHBECK
Novi, Michigan

Prepared By:

MATERIALS TESTING CONSULTANTS, INC.
Ann Arbor, Michigan

June 2021
MTC Project No. 201675



June 16, 2021
Project No. 201675

Fishbeck
39500 MacKenzie Drive, #100
Novi, MI 48377

Attention: Paul Kammer, P.E.
Senior Civil Engineer

Reference: Report of Geotechnical Investigation
Schoolgirl's Glen - Nichols Drive Culvert Replacement
Ann Arbor, Michigan

Dear Mr. Kammer:

We have completed a geotechnical investigation for the above-referenced project. The purpose of this investigation has been to identify the general subsurface soil conditions in the vicinity of the proposed construction, analyze the conditions relative to the planned construction and to provide recommendations for the design of foundations and earth-related structures. This work has been performed as described in our proposal dated February 12, 2021.

Presented herein are descriptions of our understanding of the design considerations, the geotechnical investigation, encountered conditions and engineering recommendations. The Appendix contains the report limitations and data collected during this investigation.

DESIGN CONSIDERATIONS

Available Information

We have been provided the following documents and information for use in this investigation:

- A Technical Memo for the culvert analysis prepared by Fishbeck and dated June 23, 2020.
- A request for proposal email outlining the scope of the investigation and including a boring location plan image, received from Mr. Paul Kammer, P.E. of Fishbeck on January 12, 2021.
- An email containing project elevations and a preliminary culvert cross section, received from Mr. Paul Kammer, P.E. on February 23, 2021.
- A plan set of the proposed culvert installation, with updated elevation information, received from Mr. Mr. Paul Kammer, P.E. on May 24, 2021.
- Telephone and email conversations with Mr. Paul Kammer, P.E. regarding the type of construction, boring locations and project elevations.



Location and Type of Structure

The proposed construction will be located in plan as shown on Figure No. 1. The site is located on Nichols Drive within the Nichols Arboretum in Ann Arbor, Michigan. The culvert is located at the north end of Schoolgirl's Glen, approximately 700 ft east of the Lower Arboretum Entrance on Nichols Drive.

The proposed culvert replacement is expected to consist of an 8 ft wide by 3 ft tall box culvert with 1 ft thick concrete for its top, base and sidewalls. The culvert is expected to be 30 ft long with invert elevations of 758.0 ft and 755.0 ft at the southern inlet and northern outlet, respectively. We anticipate culvert bedding will consist of 3-inches of MDOT 34R over 9-inches of MDOT 6A with bedding material wrapped in a non-woven geotextile fabric.

A concrete head wall and wing walls are planned at the inlet and outlet with base elevations expected to be near 757 ft and 754 ft at the southern inlet and northern outlet, respectively. The top of the head walls are expected to approximately match the Nichols Drive surface elevations of 764 to 766 ft, resulting in walls on the order of 9 to 12 ft tall with wing wall foundation widths anticipated to be 5 ft or greater. The wing walls are planned to be angled away from the headwall and taper down along the slope. We understand the wing wall lengths have not yet been finalized.

We should be informed of any changes between the actual design conditions and those described herein as this information may affect our recommendations.

INVESTIGATION METHODOLOGY

Conventional soil test borings and sampling, hand auger borings and dynamic cone penetrometer testing (ASTM STP 399) and field engineering reconnaissance were used to investigate the subsurface conditions. Some hand auger borings with shallow refusal were re-attempted up to two times. Boring locations are shown on Figure No. 1. Investigation procedures, soil classification information and boring logs are provided in the Appendix.

Type of Borings	Conventional Drill Rig	Hand Auger
Number of Borings	2	10
Boring Depth Range, ft.	25	0.5 to 3.5

Borings were drilled and other sampling was conducted solely to obtain indications of subsurface conditions as part of a geotechnical exploration program. No services were performed to evaluate subsurface environmental conditions.



Laboratory

Soil samples were reviewed by one of our engineers and technically classified according to the methods of ASTM D2488 "Standard Practice for Description and Identification of Soils (Visual-Manual Procedure)". Calibrated penetrometer tests were performed on cohesive samples to obtain an indication of unconfined compressive strength values.

Selected samples were subjected to various laboratory tests, including:

- ASTM D2216 "Test Methods for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass"
- ASTM D2974 "Test Methods for Determining the Water (Moisture) Content, Ash Content, and Organic Material of Peat and Other Organic Soils"

Results of the laboratory tests are provided in the Appendix.

INVESTIGATION RESULTS

Regional Geology

The *Map of the Surface Formations of the Southern Peninsula of Michigan*, published by the State of Michigan, indicates the site is in an area of spillways, adjacent to the Huron River. Soil conditions typically are found to be sorted deposits of sand and gravel with occasional cobble and boulder in this type of geologic area. The *Map of Bedrock Topography of the Southern Peninsula of Michigan* indicates bedrock to be at approximately el 650 ft, on the order of 100 ft below site elevations.

Site Conditions

At the time of our field work, the area of investigation was covered with snow. The areas north and south of Nichols Drive were generally wooded, except for the creek bed upstream and downstream of the culvert. The creek bed was generally covered in cobble and large gravel and was relatively dry, except for areas of standing water near the culvert inlet and near the Huron River. The south bank of the Huron River was observed approximately 50 ft north of the culvert outlet. The road in the vicinity of the culvert was supported by stone headwalls on either side, with the top of the headwalls 1 to 2 ft higher than the adjacent road grades.

Roadway elevations on Nichols Drive near the culvert ranged from approximately 764 to 766 ft. South of Nichols Drive, the ground surface sloped down from south to north, with a low point near elevation 761 ft at the south culvert inlet. North of Nichols Drive, the ground surface sloped down to the Huron River at the north, with an observed water elevation of approximately 751 ft. The stream bed had an elevation near 753 ft near the north culvert outlet, and it also sloped down to the north to the Huron River.



We understand from the Technical Memo for the culvert analysis prepared by Fishbeck, that the existing culvert consists of an active 30-inch pipe in poor condition and a collapsed 24-inch pipe, and the 30-inch pipe is currently located between 1 and 2 ft over the existing creek bed. We expect that fill has been placed in the vicinity of the culvert to raise the ground surface elevations to the current road elevations.

Subsurface Conditions

Borings B-1 and B-2

Borings B-1 and B-2 were drilled using conventional rig methods and were located just outside the Nichols Drive gravel surface at a ground surface elevation of 764.5 ft. Borings B-1 and B-2 encountered 1 to 4 inches of clayey topsoil at the surface. Beneath the topsoil, the borings encountered fill to a depth 5.5 ft (el 759.0 ft) consisting of soft to hard sandy lean clay (CL) and very loose to loose clayey sand (SC). Beneath the fill, Borings B-1 and B-2 encountered black sandy organic silt (OL), a possible buried topsoil, to a depth of 8.0 ft (el 756.5 ft). Beneath the organic silt, Boring B-1 encountered very loose to medium dense black clayey sand (SC) with peat lenses to a depth of 17.0 ft (el 747.5 ft) and medium dense to dense brown poorly graded sand with silt (SP-SM) or poorly graded sand (SP) to the explored depth of 25.0 ft (el 739.5 ft). Beneath the organic silt, Boring B-2 encountered very loose gray clayey sand (SC) to a depth of 12.0 ft (el 752.5 ft) and medium dense brown poorly graded sand with silt (SP-SM) or poorly graded sand (SP) to the explored depth of 25.0 ft (el 739.5 ft).

Organic content and moisture content testing were performed on samples from Borings B-1 and B-2. Samples obtained from the sandy organic silt (OL) layer in each boring at a depth of 8.0 ft (el 756.5 ft) measured organic contents ranging from 3.9 to 8.3 percent and moisture contents ranging from 31.8 to 71.0 percent. The sample taken from the black clayey sand (SC) with peat lenses in Boring B-1 at a depth of 15.0 ft (el 749.5 ft) measured an organic content of 4.5 percent and moisture content of 39.3 percent. Moisture content testing on other samples from Borings B-1 and B-2 obtained at depths of up to 10 ft (el 754.5) measured moisture contents ranging from 11.2 to 25.5 percent. A summary of the laboratory test data is provided in the Appendix.

Seepage groundwater from saturated sand lenses was encountered in Boring B-1 at depths ranging from 8.0 to 17.0 ft (el 747.5 to 756.5 ft) and in Boring B-2 at depths ranging from 2.5 to 12.0 ft (el 752.5 to 762.0 ft). Groundwater was encountered in Boring B-1 at a depth of 17.0 ft (el 747.5 ft) and in Boring B-2 at a depth of 12.0 ft (el 752.5 ft).



Borings B-3 and B-4

Borings B-3 and B-4 were drilled using hand auger methods with dynamic cone penetrometer testing and were located in the stream bed on the north and south sides of the proposed culvert. The ground surface elevation for Boring B-3, on the north side of the culvert, was 753.0 ft. The ground surface elevation for Boring B-4, on the south side of the culvert, was 761.0 ft.

The borings generally encountered medium dense brown gray poorly graded gravel with sand (GP) and met refusal at depths ranging from 0.5 to 0.8 ft on probable cobble. Borings B-3 and B-4 were re-attempted twice each (B-3A, B-3B, B-4A and B-4B) with similar results. Groundwater was encountered at a depth of 0.2 ft in Borings B-3 to B-3B.

Borings B-5 to B-8

Borings B-5 to B-8 were drilled using hand auger methods with dynamic cone penetrometer testing and were located on slopes adjacent to the creek bed on the north and south sides of Nichols Drive. Ground surface elevation for Borings B-5 and B-6, on the north side of Nichols Drive, were 754.6 and 755.9 ft, respectively. Ground surface elevation for Borings B-7 and B-8, on the south side of Nichols Drive, were 765.4 and 765.2 ft, respectively.

Borings B-5 and B-6 generally encountered sandy topsoil with a loose relative density to the explored depths of 2.8 to 3.0 ft (el 751.6 to 753.1 ft). Borings B-7 and B-8 generally encountered 1.5 ft of sandy topsoil at the surface underlain by medium dense brown poorly graded sand with silt (SP-SM) with frequent peat seams to the explored depths of 3.0 to 3.5 ft (el 761.9 to 762.2 ft). In each boring, occasional gravel was encountered within the topsoil and each boring met refusal on possible coarse gravel or cobble. Groundwater was not encountered in Borings B-5 to B-8.

Groundwater levels will fluctuate due to seasonal variations such as precipitation, snowmelt, nearby river or lake levels and other factors that may not be evident at the time of measurement. Groundwater levels may be different at the time of construction.

The relative density of granular soil is based on recorded SPT or DCP N-values, while the consistency of cohesive soil is based on both recorded SPT N-values and on estimates of the unconfined compressive strength obtained with a calibrated penetrometer.

This section has provided a generalized description of the encountered subsurface soil conditions. The boring logs located in the Appendix should be reviewed for detailed soil descriptions. A generalized subsurface profile, Figure No. 2, has been prepared which displays the boring information along an axis perpendicular to the culvert alignment. Some variation between boring locations may be expected.



CONCLUSIONS AND RECOMMENDATIONS

We expect the organic soil consisting of organic silt and the peat lenses encountered in our investigation between elevations 747.5 and 759.0 ft were a contributing factor to the deterioration of the existing culverts. Since the organic silt and peat was encountered beneath the existing culvert elevations, as the organic material decayed it would have consolidated and settled, likely causing the overlying culvert structures to settle, deform and break.

In general, support of the proposed concrete box culvert and poured concrete walls on conventional shallow foundations with bearing elevations ranging from 754.0 to 757.0 ft is expected to be feasible; however, due to the existing fill, very loose sand and organic soil consisting of organic silt and peat encountered to elevations ranging from 747.5 to 752.5 ft, subgrade improvement is expected to be required prior to installation of structures.

Subgrade improvement is expected to include undercuts on the order of 5 to 10 ft below the bearing elevation of the structures to remove unsuitable fill and organic soil full-depth. We recommend that further investigation by test pit excavation be undertaken prior to construction to delineate the extent and removal quantity of the unsuitable soil.

Given the groundwater encountered within our investigation relative to the possible undercut depths, a steel sheet piling cofferdam system may be necessary depending on groundwater levels at the time of construction to both control groundwater seepage into the excavation and to retain soil. If required, the cofferdam system should be designed by the Contractor with the design submittal stamped by a State of Michigan P.E. and submitted to the Engineer a minimum of two weeks prior to start of work for review.

The removal of soil for installation of the box culvert is expected to result in a net zero or net stress decrease on the soil underlying the culvert, with the exception of the proposed culvert wing wall foundations which have recommendations for their structural elements provided in the following section. Considering appropriate subgrade improvement is undertaken beneath the box culvert as described in this report, a minimum safety factor to resist bearing capacity of 3.0 and settlement of less than 1 inch is anticipated for the culvert.



Foundations

A conventional shallow continuous and spread foundation system is recommended for support of the proposed culvert wing walls. It is important that the recommendations of this report, in-particular those pertaining to subgrade preparation, construction observation and testing, be implemented during design and construction.

The following parameters are recommended for foundation design:

Foundation Design Parameters

Bearing pressure for culvert wing walls, maximum net allowable, psf	2,000
Minimum anticipated foundation width, inches	60
Minimum embedment depth for frost protection, inches	42

Foundations are expected to bear on approved engineered fill following full depth removal of existing unsuitable fill and organic soil consisting of organic silt and peat. Foundations may bear on native granular soil provided it is prepared appropriately and confirmed to not contain deleterious material which may affect the culvert's performance. Subgrade preparation recommendations are contained in the following section.

Foundation recommendations presented herein are based on a safety factor to resist bearing capacity failure of at least 3.0 and a maximum anticipated total foundation settlement of 1 inch or less.

Below-Grade Walls

The lateral earth pressure against below-grade walls is a function of the rigidity of the wall, the nature of the backfill material, the slope of the top surface of the retained soil and surcharge loads.

For design of below-grade rigid walls with horizontal front and backslopes, the following soil parameters may be used:

Rigid Wall Lateral Earth Pressures

Coefficient of at-rest earth pressure	0.47
Coefficient of passive earth pressure	1.5
Friction angle of backfill	32 degrees
Total unit weight of backfill	120 pcf
Friction angle between rough concrete & sand	24 degrees

The at-rest pressure is recommended for relatively rigid walls, such as culvert walls, due to the lack of minor movement that is necessary to reduce the applied pressure from the at-rest to the active condition.



For design of cantilever retaining walls, the following soil parameters may be used:

Cantilever Wall Lateral Earth Pressures

Coefficient of active earth pressure	0.33
Coefficient of passive earth pressure	3.0
Friction angle of backfill	32 degrees
Total unit weight of backfill	120 pcf
Friction angle between smooth concrete & sand	20 degrees
Friction angle between rough concrete & sand	24 degrees

Any possible surcharge loads should be included in the design of all earth-retaining structures.

Site and Subgrade Preparation

Any topsoil, vegetation, roots, organic soil including organic silt and peat and any other miscellaneous debris should be removed from within the proposed construction areas. The limits of the proposed construction area, prior to the placement of any structures or engineered fill material, should be proof-rolled and, where granular soil is present, compacted in the upper 12 inches using suitable compaction equipment to at least 95 percent of the soil's maximum ASTM D 1557 dry density by the contractor. Proof-rolling is defined as the passing of relatively heavy construction equipment over the soil subgrade under observation by the Geotechnical Engineer. The response of the soil, when subjected to the applied load, is subjectively evaluated by our staff with respect to its ability to support the overlying soil or structure. In areas where excessive deflection is observed, special subgrade preparation measures may be recommended to provide an acceptable subgrade condition. These measures may consist of compaction of the subgrade at moisture contents close to the optimum value, undercutting affected areas and replacing with engineered fill, use of a geotextile separation fabric or some combination of these measures.

Due to the fill, very loose sand and organic soil consisting of organic silt and peat encountered in the field investigation to elevations ranging from 747.5 to 752.5 ft and due to variations that may exist between borings, it is expected that some form of subgrade improvement will be required to provide suitable foundation bearing conditions. Subgrade improvement may include, but not be necessarily limited to, densification of existing soil in-place or excavation of all unsuitable material to an approved subgrade and replacement with engineered fill. If overexcavation is selected, it should encompass soil within the stress influence region of the foundation, defined as a region bordered by 2V:1H planes extending down and away from the bottom edge of the foundation to the approved bearing stratum. We expect fill and organic soil consisting of organic silt and peat will be overexcavated and very loose sand without organics may either be overexcavated or densified in-place.

The foundation subgrade should be inspected and tested by qualified geotechnical personnel familiar with the geotechnical recommendations. As part of the inspection and testing, the subgrade at each individual bearing element should be verified to be consistent with the



conditions encountered in this investigation and the indicated recommended allowable bearing pressures. This testing should include the verification of acceptable unconfined compressive strengths in cohesive soil and a dynamic cone penetrometer (ASTM STP 399) to verify minimum relative densities and equivalent N-values in granular soil. Care should be taken to maintain the natural moisture content of clayey subgrade soil which may become soft when saturated from rainfall, etc.

Engineered fill is approved on-site or imported soil placed in uniform layers and compacted to a minimum required density. Imported fill should meet the requirements for MDOT Class II granular material. MDOT Class II soil should be used as backfill against below-grade walls and foundations.

Granular engineered fill and backfill should be compacted to at least 95 percent of the soil's maximum dry density as determined by the Modified Proctor test (ASTM D1557). Vibratory compaction methods are typically found to be most effective in granular soils, however, relatively light equipment should be used adjacent to retaining or culvert walls to avoid overstressing the walls. The fill should be placed and compacted in horizontal layers not exceeding 9 inches. Field density tests (ASTM D2922) should be taken on each lift, as the fill is being placed, to verify compliance with compaction specifications. If the earthwork takes place during winter months, fill must not be placed on frozen ground and fill with frozen conglomerations of soil must not be used.

Because the site has been previously developed, there may be buried items not encountered in our borings related to the existing culvert which may cause settlement problems. The contract documents should reflect that it is necessary to remove or relocate such structures and to fill the excavation with engineered fill.

Groundwater

Groundwater was encountered in Boring B-1 at a depth of 17.0 ft (el 747.5 ft) and in Boring B-2 at a depth of 12.0 ft (el 752.5 ft), and the nearby Huron River was observed with a water level near elevation 751 ft. Seepage groundwater or possibly perched groundwater was encountered in Borings B-1 to B-3B at elevations ranging from 752.8 to 762.0 ft.

Groundwater will be encountered during construction and suitable control of groundwater should be anticipated and planned for accordingly before the start of construction. The contractor should be responsible for selecting and implementing an appropriate groundwater control system. The contractor should have previous dewatering experience on sites with similar conditions. Suitable silt and sediment traps should be incorporated into the dewatering system.

To prevent the accumulation of water and resulting hydrostatic pressure along below-grade walls, a footing drain should be included in the design.



Slopes and Temporary Excavations

The owner and the contractor should make themselves aware of and become familiar with applicable local, state, and federal safety regulations, including current OSHA excavation and trench safety standards. Construction site safety generally is the sole responsibility of the contractor. The contractor shall also be solely responsible for the means, methods, techniques, sequences and operations of construction operations. We are providing the following information solely as a service on this project and, under no circumstances, should our provision of the following information be construed to mean that we are assuming responsibility for construction site safety or the contractor's activities; such responsibility is not implied and should not be inferred.

The contractor should be aware that slope height, slope inclination, and excavation depths (including utility trench excavations) should in no case exceed those specified in local, state, or federal safety regulations; e.g., OSHA Health and Safety Standards for Excavations, 29 CFR Part 1926, or successor regulations. For this site, the overburden soil encountered in our exploratory program is primarily granular. We anticipate that OSHA will classify these materials as Type C. OSHA recommends a maximum slope inclination of 1 ½H:1V for this type of soil under ideal conditions. If any excavation is extended to a depth of more than 20 ft, OSHA requires that the side slopes of such excavation be designed by a professional engineer registered in the State of Michigan.

As an alternative to temporary slopes, vertical excavations can be temporarily shored. The contractor or the specialty subcontractor should be responsible for the design of the temporary shoring in accordance with applicable regulatory requirements. Temporary shoring may consist of a steel sheet pile cofferdam system depending on groundwater elevations at the time of construction and the Contractor's selected means and methods.

CLOSURE

In this report, descriptions of the geotechnical investigation, encountered conditions and recommendations for the design of foundations and earth-related structures have been presented. The limitations of this study are described in the Appendix.

The recommendations presented in this report are based upon a limited number of subsurface samples obtained from various sampling locations. The samples may not fully indicate the nature and extent of the variations that actually exist between sampling locations. For that reason, among others, we strongly recommend that a qualified geotechnical firm be retained to observe earthwork construction. If variations or other latent conditions become evident during construction, it will be necessary for us to review these conditions and our recommendations as appropriate.



We appreciate the opportunity to provide this service to you on this project. Should you have any questions or require further assistance, please contact our office.

Sincerely,

MATERIALS TESTING CONSULTANTS, INC.

A handwritten signature in blue ink that reads "R. J. Warren".

Robert J. Warren, P.E.
Project Manager

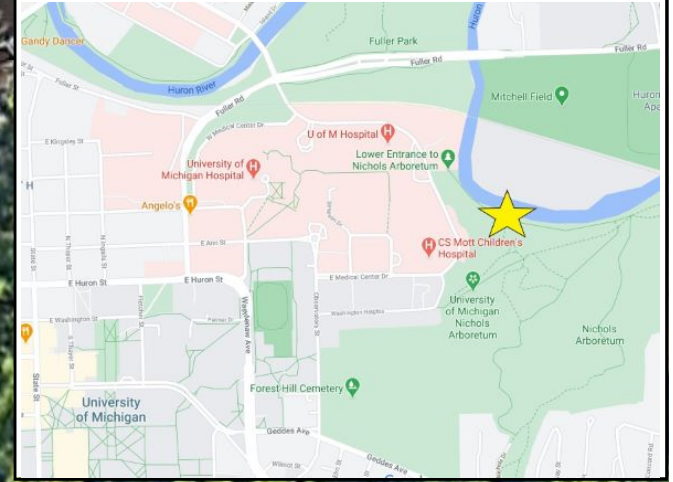


A handwritten signature in blue ink that reads "Todd D. Munger".

Todd D. Munger, P.E.
Senior Project Manager

- Attachments:
- Figure No. 1 - Boring Location Plan
 - Figure No. 2 - Generalized Subsurface Profile
 - Appendix
 - Limitations
 - Test Drilling and Sampling Procedures
 - Boring Log Terminology and Classification Outline
 - Boring Logs
 - Summary of Laboratory Test Data

SITE VICINITY MAP
NOT TO SCALE



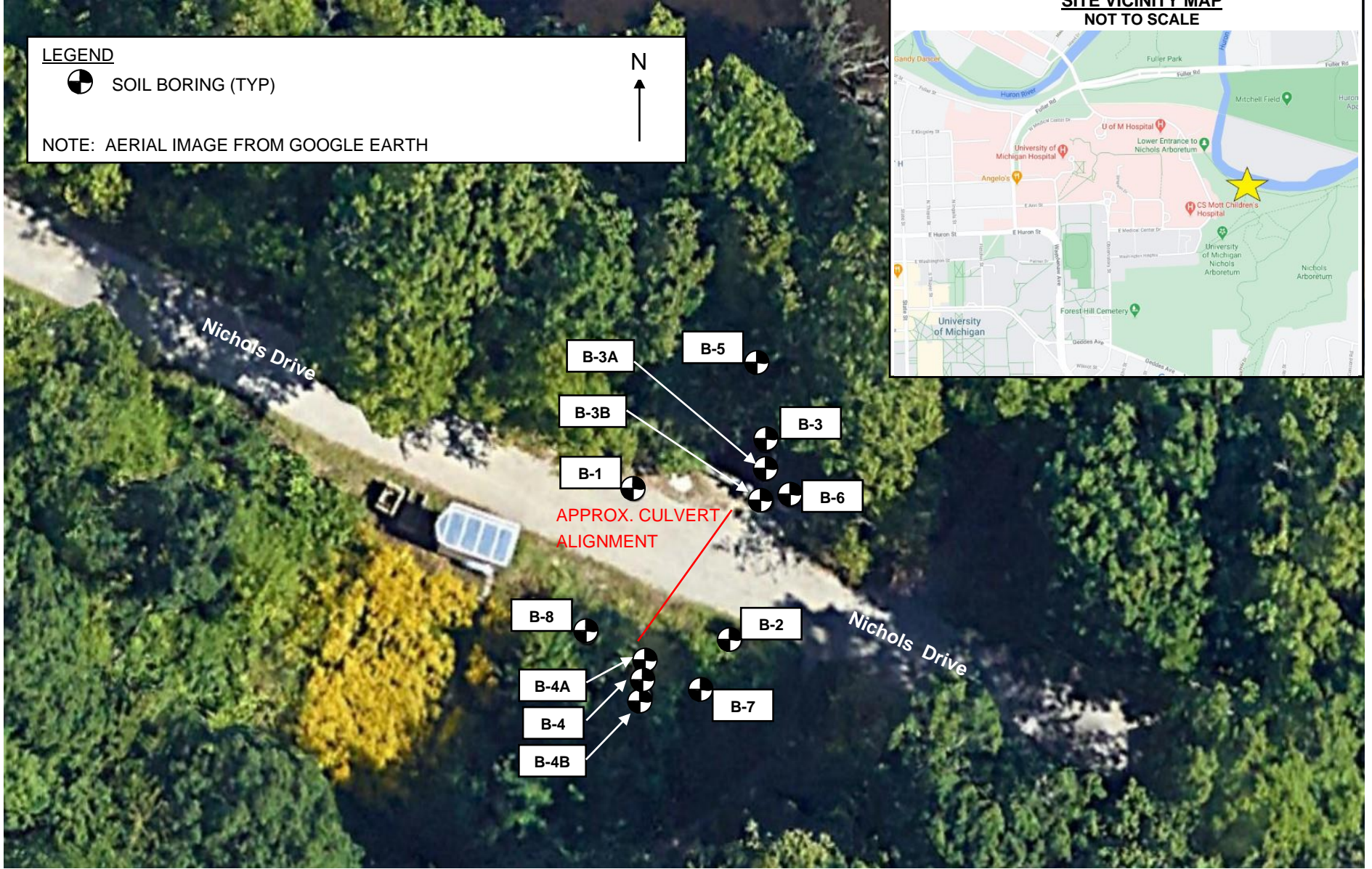
LEGEND

SOIL BORING (TYP)

N



NOTE: AERIAL IMAGE FROM GOOGLE EARTH



TITLE: BORING LOCATION PLAN

PROJECT: SCHOOLGIRL'S GLEN - NICHOLS DRIVE CULVERT REPLACEMENT

SCALE: NS

DATE: 03-15-2021

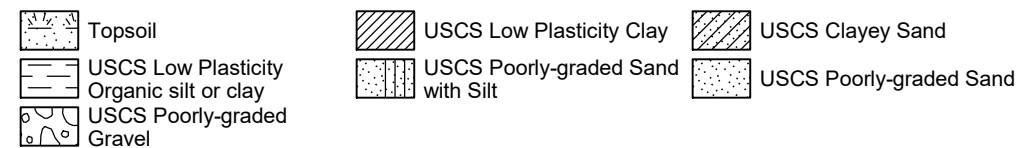
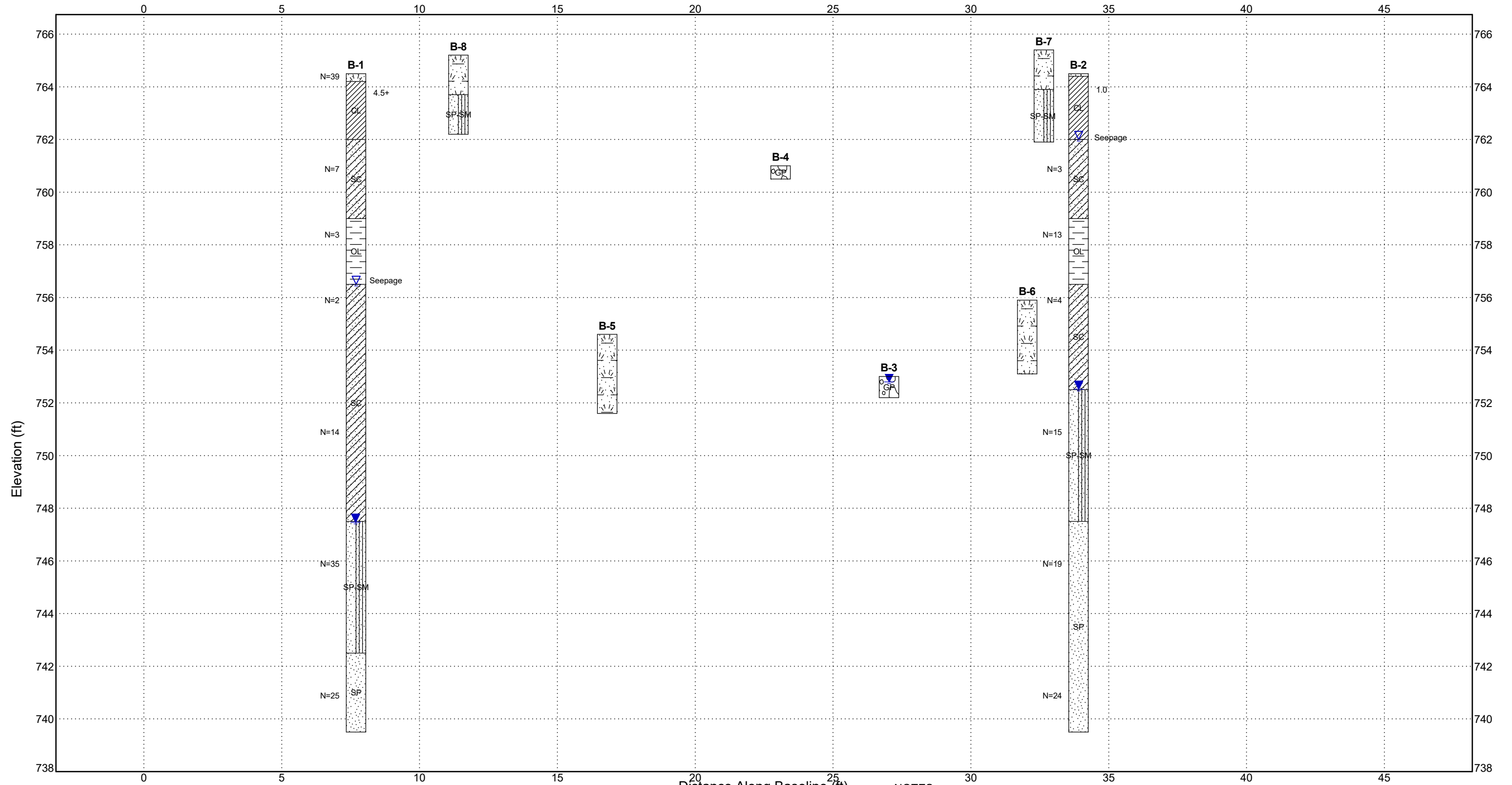
PROJECT NO.: 201675

FIG. NO.: 1

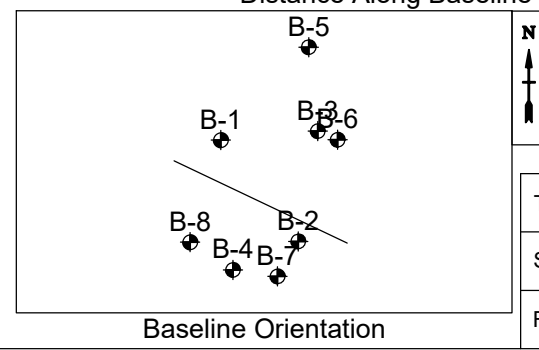
DR. BY: KV

REV. BY: RW





NOTES:
 1. SUBSURFACE CONDITONS ARE GENERALIZED. REFER TO BORING LOGS FOR SPECIFIC DESCRIPTIONS.
 2. CONDITIONS BETWEEN BORINGS AND GROUNDWATER ELEVATIONS BETWEEN BORINGS MAY VARY.



TITLE: GENERALIZED SUBSURFACE PROFILE			PROJECT: SCHOOLGIRL'S GLEN - NICHOLS DRIVE CULVERT REPLACEMENT	
SCALE: VISUAL	DATE: 3-15-21	PROJECT NO.: 201675	Materials Testing Consultants, INC	
FIG. NO.: 2	DR. BY: RW	REV. BY: RW		



APPENDIX

- Limitations
- Test Drilling and Sampling Procedures
- Boring Log Terminology and Classification Outline
- Boring Logs
- Summary of Laboratory Test Data



LIMITATIONS

Soil Variations

The recommendations in this report are based upon the data obtained from the soil borings. This report does not reflect variations which may occur between these borings, and which would not become evident until construction. If variations then become evident, it would be necessary for a re-evaluation of recommendations of this report, after performing on-site observations.

Warranties

We have prepared this report in accordance with generally accepted soil and foundation engineering practices. We make no other warranties, either expressed or implied, as to the professional advice provided under the terms of our agreement and included in this report. This report is prepared exclusively for our client and may not be relied upon by other parties without written consent from our office.

Boring Logs

In the process of obtaining and testing samples and preparing this report, we follow reasonable and accepted practice in the field of soil engineering. Field logs maintained during drilling describe field occurrences, sampling locations, and other information. The samples obtained in the field are subjected to additional testing in the laboratory and differences may exist between the field logs and the final logs. The engineer reviews the field logs and laboratory test data, and then prepares the final boring logs. Our recommendations are based on the contents of the final logs.

Review of Design Plans and Specifications

In the event that any changes in the design of the building or the location, however slight, are planned, our recommendations shall not be considered valid unless modified or approved in writing by our office. We recommend that we be provided the opportunity to review the final design and specifications in order to determine whether changes in the original concept may have affected the validity of our recommendations, and whether our recommendations have, in fact, been implemented in the design and specifications.



TEST DRILLING AND SAMPLING PROCEDURES

Test Drilling Methods:

- Hollow stem auger, ASTM D6151
- Mud rotary, ASTM D5783
- Casing advancer, ASTM D5872
- Rock coring, ASTM D2113
- Cone Penetration Testing, ASTM D5778

Note: Cone penetration test data can be used to interpret subsurface stratigraphy and can provide data on engineering properties of soils. The ASTM procedure does not include a procedure for determining soil classification from CPT testing. Soil classifications shown on CPT logs are based on published procedures and are not based on physical ASTM soil classification tests.

Sampling Methods:

- SPT, ASTM D1586, CME Auto hammer (140 lb., 30" drop, 2" OD split spoon sampler)
- Thin-walled tube sampler (Shelby), ASTM D1587

Note: The number of hammer blows required to drive the SPT sampler 12 inches, after seating 6 inches, is termed the soil N-value and provides an indication of the soil's relative density and strength parameters at the sample location. SPT blow counts in 6 inch increments are recorded on the boring logs.

Drill Rig:

- CME 45
- CME 750 Rubber tired (ATV)
- CME 95 Truck
- Geoprobe Direct Push
- Geoprobe Rotary Sonic

Boreholes Backfilled With:

- Excavated soil
- Cement bentonite grout
- Piezometer or Monitoring Well (see notes on logs)
- Concrete or asphalt patch where appropriate

Sample Handling and Disposition:

- SPT samples labeled, placed in jars, returned to MTC Laboratory
- Discard after 60 days



BORING LOG TERMINOLOGY AND ASTM D 2488 CLASSIFICATION OUTLINE

TERMS DESCRIBING CONSISTENCY OR CONDITION

COARSE-GRAINED SOILS (major portions retained on No. 200 sieve): includes (1) clean gravel and sands and (2) silty or clayey gravels and sands. Condition is rated according to relative density as determined by laboratory tests or standard penetration resistance tests.

Descriptive Terms	Relative Density	SPT Blow Count
Very loose	0 to 15 %	< 5
Loose	15 to 35 %	5 to 10
Medium dense	35 to 65 %	10 to 30
Dense	65 to 85 %	30 to 50
Very dense	85 to 100 %	> 50

Per ASTM D2487, the following conditions must be met based on laboratory testing to justify the label 'well graded' in a soil description.

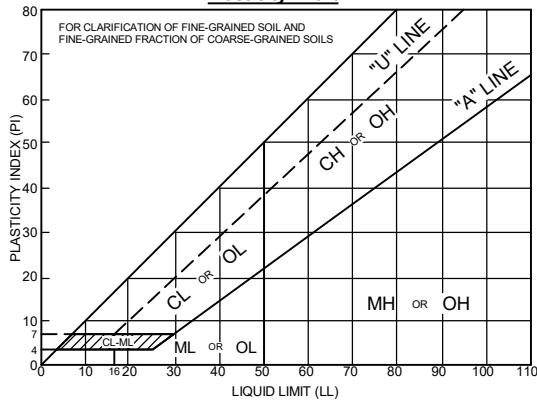
Gravel: $C_u = \frac{D_{60}}{D_{10}}$ greater than 4; $C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ between 1 and 3

Sand: $C_u = \frac{D_{60}}{D_{10}}$ greater than 6; $C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ between 1 and 3

FINE-GRAINED SOILS (major portions passing on No. 200 sieve): includes (1) inorganic and organic silts and clays, (2) gravelly, sandy, or silty clays, and (3) clayey silts. Consistency is rated according to shearing strength, as indicated by penetrometer readings, SPT blow count, or unconfined compression tests.

Descriptive Terms	Unconfined Compressive Strength TSF	SPT Blow Count
Very soft	< 0.25	< 2
Soft	0.25 to 0.5	2 to 4
Medium stiff	0.5 to 1.0	4 to 8
Stiff	1.0 to 2.0	8 to 15
Very stiff	2.0 to 4.0	15 to 30
Hard	> 4.0	> 30

Plasticity Chart



MAJOR DIVISIONS				TYPICAL NAMES
COARSE-GRAINED SOILS MORE THAN HALF IS COARSER THAN NO. 200 SIEVE	GRAVELS MORE THAN HALF COARSE FRACTION IS LARGER THAN NO. 4 SIEVE	CLEAN GRAVELS WITH LESS THAN 15% FINES	GW	WELL-GRADED GRAVELS WITH OR WITHOUT SAND
		GRAVELS WITH 15% OR MORE FINES	GP	POORLY-GRADED GRAVELS WITH OR WITHOUT SAND
			GM	SILTY GRAVELS WITH OR WITHOUT SAND
		GC	CLAYEY GRAVELS WITH OR WITHOUT SAND	
	SANDS MORE THAN HALF COARSE FRACTION IS FINER THAN NO. 4 SIEVE SIZE	CLEAN SANDS WITH LESS THAN 15% FINES	SW	WELL-GRADED SANDS WITH OR WITHOUT GRAVEL
			SP	POORLY-GRADED SANDS WITH OR WITHOUT GRAVEL
		SANDS WITH 15% OR MORE FINES	SP-SM	POORLY-GRADED SANDS WITH SILT WITH OR WITHOUT GRAVEL
			SM	SILTY SANDS WITH OR WITHOUT GRAVEL
		SC	CLAYEY SANDS WITH OR WITHOUT GRAVEL	
		FINE-GRAINED SOILS MORE THAN HALF IS FINER THAN NO. 200 SIEVE	SILTS AND CLAYS LIQUID LIMIT 50% OR LESS	ML
CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY WITH OR WITHOUT SAND OR GRAVEL			
OL	ORGANIC SILTS OR CLAYS OF LOW TO MEDIUM PLASTICITY WITH OR WITHOUT SAND OR GRAVEL			
SILTS AND CLAYS LIQUID LIMIT GREATER THAN 50%	MH		INORGANIC SILTS OF HIGH PLASTICITY WITH OR WITHOUT SAND OR GRAVEL	
	CH		INORGANIC CLAYS OF HIGH PLASTICITY WITH OR WITHOUT SAND OR GRAVEL	
OH	ORGANIC SILTS OR CLAYS OF HIGH PLASTICITY WITH OR WITHOUT SAND OR GRAVEL			
HIGHLY ORGANIC SOILS		PT/OL	PEAT AND OTHER HIGHLY ORGANIC SOILS	

GENERAL NOTES

- Classifications are based on the United Soil Classification System and include consistency, moisture, and color. Field descriptions have been modified to reflect results of laboratory tests where deemed appropriate.
- "Grades with" or "Grades without" may be used to describe soil when characteristics vary within a stratum.
- Preserved soil samples will be discarded after 60 days unless alternate arrangements have been made.

GROUNDWATER OBSERVATIONS:

During - indicates water level encountered during the boring
End - indicates water level immediately after drilling
Date and Depth - Measurements at indicated date

SAMPLE TYPES AND NUMBERING

S	SPT, split barrel sample, ASTM D1586
U	Shelby tube sample, ASTM D1587
R	Rock core run
*S	Other than 2" split barrel sample
L	SPT with liner, ASTM D1586
A	Auger cuttings
G	Geoprobe liner

MINOR COMPONENT QUANTIFYING TERMS

Less than 5%	TRACE
5 to 10%	FEW
15 to 25%	LITTLE
30 to 40%	SOME
50 to 100%	MOSTLY

GRAIN SIZE

BOULDER	>12"
COBBLE	12" to 3"
COARSE GRAVEL	3" to 0.75"
FINE GRAVEL	0.75" to No. 4
COARSE SAND	No. 4 to No. 10
MEDIUM SAND	No. 10 to No. 40
FINE SAND	No. 40 to No. 200



LOG OF BORING

Project No.: 201675

Boring No.: B-1

Sheet: 1 of 1

Project: Schoolgirl's Glen - Nichols Drive Culvert Replacement

Client: Fishbeck

Location: Ann Arbor, Michigan

Drill Type: CME 45

Crew Chief: ZM **Field Eng.:** JS **Rev. By:** RW

Coordinates: N=285984.8 E=13297135.8 (MI South lift)

Elevation: 764.5 ft **Datum:** NAVD 88 (GPS Observation)

Notes:

Plugging Record: Backfilled borehole with compacted cuttings. Cave in at 6.6 ft.

Date Begin: 02/22/2021

Date End: 02/22/2021

Tooling	Type	Dia.	Groundwater, ft.	
Casing	HSA	3 1/4"	During	8.0
Sampler	SPT	2"	End	5.6*
Core			Seepage	8.0
Tube			Date	Depth, ft.
SPT Hammer	Auto			

Depth Drilled: 25.0 ft.

Component Percentages: Trace < 5%, Few 5-10%, Little 15-25%, Some 30-45%, Mostly 50-100%

QP = Calibrated Penetrometer (tons/sq. ft.)

Elev. FT.	Depth FT.	Sample Number	Recov. FT.	Penetration (Blows Per 6") ASTM D 1586	*USCS Group Symbol	*DESCRIPTION	QP tsf	MST %	DD pcf	REMARKS
763.5	1	S-1	1.5	13-24-15 N=39	CL	4" Clayey Topsoil	0.3	4.5+	11.5	Fill: 0' to 5.5'
762.5	2					Brown to black sandy CLAY; mostly clayey fines, some coarse to fine sand, moist, Fill	2.5			
761.5	3	S-2	1.5	2-4-3 N=7	SC	Brown clayey SAND; mostly coarse to fine sand, little clayey fines, moist, Fill	5.5	11.2	31.8	S-3: Organic content = 3.9%
760.5	4									
759.5	5	S-3	1.5	3-2-1 N=3	OL	Black sandy organic SILT; mostly silty fines, some coarse to fine sand, trace organic fines, moist, possible buried topsoil	8.0	39.3	S-4: Poor recovery; possible coarse gravel / COBBLE *Charged augers with water at 10.0'	
758.5	6									
757.5	7	S-4	0.2	1-1-1 N=2	SC	Black clayey SAND; mostly coarse to fine sand, some clayey fines, moist with occasional peat lenses and wet sand lenses	17.0	22.0	S-5: Organic content = 4.5%	
756.5	8									
755.5	9	S-5	1.5	7-7-7 N=14	SP-SM	Brown poorly graded SAND with silt; mostly coarse to fine sand, few silty fines, few coarse to fine gravel, wet	22.0	25.0	S-6: First sampler had no recovery, second attempt taken.	
754.5	10									
753.5	11	S-6	1.5	13-17-18 N=35	SP	Brown poorly graded SAND; mostly coarse to fine sand, wet	25.0			
752.5	12									
751.5	13	S-7	1.5	7-10-15 N=25	SP					
750.5	14									
749.5	15									
748.5	16									
747.5	17									
746.5	18									
745.5	19									
744.5	20									
743.5	21									
742.5	22									
741.5	23									
740.5	24									
739.5	25									

End of Boring

* Visual estimate following ASTM D 2488 unless laboratory testing has been performed. Stratification changes are approximated between samples.



LOG OF BORING

Project No.: 201675

Boring No.: B-2

Sheet: 1 of 1

Project: Schoolgirl's Glen - Nichols Drive Culvert Replacement

Client: Fishbeck

Location: Ann Arbor, Michigan

Drill Type: CME 45

Crew Chief: ZM **Field Eng.:** JS **Rev. By:** RW

Coordinates: N=285961.4 E=13297153.7 (MI South lift)

Elevation: 764.5 ft **Datum:** NAVD 88 (GPS Observation)

Notes:

Date Begin: 02/22/2021

Date End: 02/22/2021

Tooling	Type	Dia.	Groundwater, ft.	
Casing	HSA	3 1/4"	During	2.5
Sampler	SPT	2"	End	2.5*
Core			Seepage	2.5
Tube			Date	Depth, ft.
SPT Hammer	Auto			

Plugging Record: Backfilled borehole with compacted cuttings. Cave in at 9.5 ft.

Depth Drilled: 25.0 ft.

Component Percentages: Trace < 5%, Few 5-10%, Little 15-25%, Some 30-45%, Mostly 50-100%

QP = Calibrated Penetrometer (tons/sq. ft.)

Elev. FT.	Depth FT.	Sample Number	Recov. FT.	Penetration (Blows Per 6") ASTM D 1586	*USCS Group Symbol	*DESCRIPTION	QP tsf	MST %	DD pcf	REMARKS
763.5	1	S-1	0.4	50/5"	CL	1" Clayey Topsoil	0.1	1.0	16.9	Fill: 0' to 5.5' S-1: Poor recovery; possible coarse gravel / COBBLE S-3: Organic content = 8.3% *Charged augers with water at 15.0'
762.5	2					Brown sandy CLAY; mostly clayey fines, some coarse to fine sand, few coarse to fine gravel, moist, Fill	2.5			
761.5	3									
760.5	4	S-2	1.5	5-2-1 N=3	SC	Gray clayey SAND; mostly coarse to fine sand, some clayey fines, moist, Fill with occasional peat and wet sand lenses	5.5			
759.5	5									
758.5	6	S-3	1.5	8-7-6 N=13	OL	Black sandy organic SILT; mostly silty fines, some coarse to fine sand, few organic fines, moist, possible buried topsoil	8.0			
757.5	7									
756.5	8									
755.5	9	S-4	1.5	3-2-2 N=4	SC	Gray clayey SAND; mostly coarse to fine sand, some clayey fines, moist with occasional wet sand lenses	12.0			
754.5	10									
753.5	11	S-5	1.5	7-7-8 N=15	SP-SM	Brown poorly graded SAND with silt; mostly medium to fine sand, few silty fines, wet	17.0			
752.5	12									
751.5	13									
750.5	14									
749.5	15									
748.5	16	S-6	1.5	7-9-10 N=19	SP	Brown poorly graded SAND; mostly coarse to fine sand, wet	25.0			
747.5	17									
746.5	18									
745.5	19									
744.5	20	S-7	1.5	11-11-13 N=24						
743.5	21									
742.5	22									
741.5	23									
740.5	24									
739.5	25									

End of Boring

* Visual estimate following ASTM D 2488 unless laboratory testing has been performed. Stratification changes are approximated between samples.



LOG OF BORING

Project No.: 201675

Boring No.: B-3

Sheet: 1 of 1

Project: Schoolgirl's Glen - Nichols Drive Culvert Replacement

Client: Fishbeck

Location: Ann Arbor, Michigan

Drill Type: Hand Auger

Crew Chief: Field Eng.: JS Rev. By: RW

Coordinates: N=285986.9 E=13297158.2 (MI South 1ft)

Elevation: 753.0 ft Datum: NAVD 88 (GPS Observation)

Notes:

Plugging Record: Backfilled borehole with compacted cuttings.

Date Begin: 02/23/2021

Date End: 02/23/2021

Tooling	Type	Dia.	Groundwater, ft.	
Casing			During	0.2
Sampler	Hand Auger	3 1/4"	End	0.2
Core			Seepage	
Tube			Date	Depth, ft.
SPT Hammer				

Depth Drilled: 0.8 ft.

Component Percentages: Trace < 5%, Few 5-10%, Little 15-25%, Some 30-45%, Mostly 50-100%

QP = Calibrated Penetrometer (tons/sq. ft.)

Elev. FT.	Depth FT.	Sample Number	Recov. FT.	Dyn. Cone Eq. "N": ASTM STP 399	*USCS Group Symbol	*DESCRIPTION	QP tsf	MST %	DD pcf	REMARKS
752.8	0.25	A-1		10	GP	Brown gray poorly graded GRAVEL with sand; mostly coarse to fine gravel, some coarse to fine sand, moist Grades wet at 0.2'	0.8			
752.5	0.50									
752.3	0.75									
						End of Boring				Auger refusal at 0.8' due to probable COBBLE

* Visual estimate following ASTM D 2488 unless laboratory testing has been performed. Stratification changes are approximated between samples.



LOG OF BORING

Project No.: 201675

Boring No.: B-3A

Sheet: 1 of 1

Project: Schoolgirl's Glen - Nichols Drive Culvert Replacement

Client: Fishbeck

Location: Ann Arbor, Michigan

Drill Type: Hand Auger

Crew Chief: Field Eng.: JS Rev. By: RW

Coordinates: N=285988.9 E=13297158.2 (MI South 1ft)

Elevation: 753.0 ft Datum: NAVD 88 (GPS Observation)

Notes:

Plugging Record: Backfilled borehole with compacted cuttings.

Date Begin: 02/23/2021

Date End: 02/23/2021

Tooling	Type	Dia.	Groundwater, ft.	
Casing			During	0.2
Sampler	Hand Auger	3 1/4"	End	0.2
Core			Seepage	
Tube			Date	Depth, ft.
SPT Hammer				

Depth Drilled: 0.8 ft.

Component Percentages: Trace < 5%, Few 5-10%, Little 15-25%, Some 30-45%, Mostly 50-100%

QP = Calibrated Penetrometer (tons/sq. ft.)

Elev. FT.	Depth FT.	Sample Number	Recov. FT.	Dyn. Cone Eq. "N": ASTM STP 399	*USCS Group Symbol	*DESCRIPTION	QP tsf	MST %	DD pcf	REMARKS
752.8	0.25			10		Brown gray poorly graded GRAVEL with sand; mostly coarse to fine gravel, some coarse to fine sand, moist Grades wet at 0.2'				
752.5	0.50				GP					
752.3	0.75						0.8			
						End of Boring				Auger refusal at 0.8' due to probable COBBLE

* Visual estimate following ASTM D 2488 unless laboratory testing has been performed. Stratification changes are approximated between samples.



LOG OF BORING

Project No.: 201675

Boring No.: B-3B

Sheet: 1 of 1

Project: Schoolgirl's Glen - Nichols Drive Culvert Replacement

Client: Fishbeck

Location: Ann Arbor, Michigan

Drill Type: Hand Auger

Crew Chief: Field Eng.: JS Rev. By: RW

Coordinates: N=285983.9 E=13297158.2 (MI South 1ft)

Elevation: 753.0 ft Datum: NAVD 88 (GPS Observation)

Notes:

Plugging Record: Backfilled borehole with compacted cuttings.

Date Begin: 02/23/2021

Date End: 02/23/2021

Tooling	Type	Dia.	Groundwater, ft.	
Casing			During	0.2
Sampler	Hand Auger	3 1/4"	End	0.2
Core			Seepage	
Tube			Date	Depth, ft.
SPT Hammer				

Depth Drilled: 0.8 ft.

Component Percentages: Trace < 5%, Few 5-10%, Little 15-25%, Some 30-45%, Mostly 50-100%

QP = Calibrated Penetrometer (tons/sq. ft.)

Elev. FT.	Depth FT.	Sample Number	Recov. FT.	Dyn. Cone Eq. "N": ASTM STP 399	*USCS Group Symbol	*DESCRIPTION	QP tsf	MST %	DD pcf	REMARKS
752.8	0.25			11		Brown gray poorly graded GRAVEL with sand; mostly coarse to fine gravel, moist Grades wet at 0.2'				
752.5	0.50				GP					
752.3	0.75						0.8			
						End of Boring				Auger refusal at 0.8' due to probable COBBLE

* Visual estimate following ASTM D 2488 unless laboratory testing has been performed. Stratification changes are approximated between samples.



LOG OF BORING

Project No.: 201675

Boring No.: B-4

Sheet: 1 of 1

Project: Schoolgirl's Glen - Nichols Drive Culvert Replacement

Client: Fishbeck

Location: Ann Arbor, Michigan

Drill Type: Hand Auger

Crew Chief: Field Eng.: JS Rev. By: RW

Coordinates: N=285954.8 E=13297138.6 (MI South 1ft)

Elevation: 761.0 ft Datum: NAVD 88 (GPS Observation)

Notes:

Plugging Record: Backfilled borehole with compacted cuttings.

Date Begin: 02/23/2021

Date End: 02/23/2021

Tooling	Type	Dia.	Groundwater, ft.	
Casing			During	None
Sampler	Hand Auger	3 1/4"	End	NA
Core			Seepage	
Tube			Date	Depth, ft.
SPT Hammer				

Depth Drilled: 0.5 ft.

Component Percentages: Trace < 5%, Few 5-10%, Little 15-25%, Some 30-45%, Mostly 50-100%

QP = Calibrated Penetrometer (tons/sq. ft.)

Elev. FT.	Depth FT.	Sample Number	Recov. FT.	Dyn. Cone Eq. "N": ASTM STP 399	*USCS Group Symbol	*DESCRIPTION	QP tsf	MST %	DD pcf	REMARKS
760.8	0.25	A-1			GP	Brown gray poorly graded GRAVEL with sand; mostly coarse to fine gravel. some coarse to fine sand, moist				
760.5	0.50						0.5			
						End of Boring				Auger refusal at 0.5' due to probable COBBLE

* Visual estimate following ASTM D 2488 unless laboratory testing has been performed. Stratification changes are approximated between samples.



LOG OF BORING

Project No.: 201675

Boring No.: B-4A

Sheet: 1 of 1

Project: Schoolgirl's Glen - Nichols Drive Culvert Replacement

Client: Fishbeck

Location: Ann Arbor, Michigan

Drill Type: Hand Auger

Crew Chief: Field Eng.: JS **Rev. By:** RW

Coordinates: N=285956.8 E=13297138.6 (MI South 1ft)

Elevation: 761.0 ft **Datum:** NAVD 88 (GPS Observation)

Notes:

Plugging Record: Backfilled borehole with compacted cuttings.

Date Begin: 02/23/2021

Date End: 02/23/2021

Tooling	Type	Dia.	Groundwater, ft.	
Casing			During	None
Sampler	Hand Auger	3 1/4"	End	NA
Core			Seepage	
Tube			Date	Depth, ft.
SPT Hammer				

Depth Drilled: 0.5 ft.

Component Percentages: Trace < 5%, Few 5-10%, Little 15-25%, Some 30-45%, Mostly 50-100%

QP = Calibrated Penetrometer (tons/sq. ft.)

Elev. FT.	Depth FT.	Sample Number	Recov. FT.	Dyn. Cone Eq. "N": ASTM STP 399	*USCS Group Symbol	*DESCRIPTION	QP tsf	MST %	DD pcf	REMARKS
760.8	0.25				GP	Brown gray poorly graded GRAVEL with sand; mostly coarse to fine gravel, some coarse to fine sand, moist				
760.5	0.50						0.5			
						End of Boring				Auger refusal at 0.5' due to probable COBBLE

* Visual estimate following ASTM D 2488 unless laboratory testing has been performed. Stratification changes are approximated between samples.



LOG OF BORING

Project No.: 201675

Boring No.: B-4B

Sheet: 1 of 1

Project: Schoolgirl's Glen - Nichols Drive Culvert Replacement

Client: Fishbeck

Location: Ann Arbor, Michigan

Drill Type: Hand Auger

Crew Chief: Field Eng.: JS Rev. By: RW

Coordinates: N=285951.8 E=13297138.6 (MI South 1ft)

Elevation: 761.0 ft Datum: NAVD 88 (GPS Observation)

Notes:

Plugging Record: Backfilled borehole with compacted cuttings.

Date Begin: 02/23/2021

Date End: 02/23/2021

Tooling	Type	Dia.	Groundwater, ft.	
Casing			During	None
Sampler	Hand Auger	3 1/4"	End	NA
Core			Seepage	
Tube			Date	Depth, ft.
SPT Hammer				

Depth Drilled: 0.5 ft.

Component Percentages: Trace < 5%, Few 5-10%, Little 15-25%, Some 30-45%, Mostly 50-100%

QP = Calibrated Penetrometer (tons/sq. ft.)

Elev. FT.	Depth FT.	Sample Number	Recov. FT.	Dyn. Cone Eq. "N": ASTM STP 399	*USCS Group Symbol	*DESCRIPTION	QP tsf	MST %	DD pcf	REMARKS
760.8	0.25				GP	Brown gray poorly graded GRAVEL with sand; mostly coarse to fine gravel, some coarse to fine sand, moist				
760.5	0.50						0.5			
						End of Boring				Auger refusal at 0.5' due to probable COBBLE

* Visual estimate following ASTM D 2488 unless laboratory testing has been performed. Stratification changes are approximated between samples.



LOG OF BORING

Project No.: 201675

Boring No.: B-5

Sheet: 1 of 1

Project: Schoolgirl's Glen - Nichols Drive Culvert Replacement

Client: Fishbeck

Location: Ann Arbor, Michigan

Drill Type: Hand Auger

Crew Chief: Field Eng.: JS **Rev. By:** RW

Coordinates: N=286006.3 E=13297156.1 (MI South 1ft)

Elevation: 754.6 ft **Datum:** NAVD 88 (GPS Observation)

Notes:

Plugging Record: Backfilled borehole with compacted cuttings.

Date Begin: 02/24/2021

Date End: 02/24/2021

Tooling	Type	Dia.	Groundwater, ft.	
Casing			During	None
Sampler	Hand Auger	3 1/4"	End	NA
Core			Seepage	
Tube			Date	Depth, ft.
SPT Hammer				

Depth Drilled: 3.0 ft.

Component Percentages: Trace < 5%, Few 5-10%, Little 15-25%, Some 30-45%, Mostly 50-100%

QP = Calibrated Penetrometer (tons/sq. ft.)

Elev. FT.	Depth FT.	Sample Number	Recov. FT.	Dyn. Cone Eq. "N": ASTM STP 399	*USCS Group Symbol	*DESCRIPTION	QP tsf	MST %	DD pcf	REMARKS
754.4	0.25	A-1		5		Sandy Topsoil with occasional roots and few coarse to fine gravel				
754.1	0.50									
753.9	0.75									
753.6	1.00									
753.4	1.25									
753.1	1.50									
752.9	1.75									
752.6	2.00	A-2		8						
752.4	2.25									
752.1	2.50									
751.9	2.75									
751.6	3.00									

End of Boring

3.0

Auger refusal at 3.0' due to possible coarse gravel / COBBLE

* Visual estimate following ASTM D 2488 unless laboratory testing has been performed. Stratification changes are approximated between samples.



LOG OF BORING

Project No.: 201675

Boring No.: B-6

Sheet: 1 of 1

Project: Schoolgirl's Glen - Nichols Drive Culvert Replacement

Client: Fishbeck

Location: Ann Arbor, Michigan

Drill Type: Hand Auger

Crew Chief: Field Eng.: JS **Rev. By:** RW

Coordinates: N=285984.9 E=13297162.8 (MI South ift)

Elevation: 755.9 ft **Datum:** NAVD 88 (GPS Observation)

Notes:

Plugging Record: Backfilled borehole with compacted cuttings.

Date Begin: 02/24/2021

Date End: 02/24/2021

Tooling	Type	Dia.	Groundwater, ft.	
Casing			During	None
Sampler	Hand Auger	3 1/4"	End	NA
Core			Seepage	
Tube			Date	Depth, ft.
SPT Hammer				

Depth Drilled: 2.8 ft.

Component Percentages: Trace < 5%, Few 5-10%, Little 15-25%, Some 30-45%, Mostly 50-100%

QP = Calibrated Penetrometer (tons/sq. ft.)

Elev. FT.	Depth FT.	Sample Number	Recov. FT.	Dyn. Cone Eq. "N": ASTM STP 399	*USCS Group Symbol	*DESCRIPTION	QP tsf	MST %	DD pcf	REMARKS
755.7	0.25	A-1		7		Sandy Topsoil with occsaional roots and few coarse to fine gravel				
755.4	0.50									
755.2	0.75									
754.9	1.00									
754.7	1.25									
754.4	1.50									
754.2	1.75	A-2		9						
753.9	2.00									
753.7	2.25									
753.4	2.50									
753.2	2.75						2.8			
						End of Boring				Auger refusal at 2.8' due to possible coarse gravel / COBBLE

* Visual estimate following ASTM D 2488 unless laboratory testing has been performed. Stratification changes are approximated between samples.



LOG OF BORING

Project No.: 201675

Boring No.: B-7

Sheet: 1 of 1

Project: Schoolgirl's Glen - Nichols Drive Culvert Replacement

Client: Fishbeck

Location: Ann Arbor, Michigan

Drill Type: Hand Auger

Crew Chief: Field Eng.: JS **Rev. By:** RW

Coordinates: N=285953.3 E=13297148.9 (MI South 1ft)

Elevation: 765.4 ft **Datum:** NAVD 88 (GPS Observation)

Notes:

Plugging Record: Backfilled borehole with compacted cuttings.

Date Begin: 02/24/2021

Date End: 02/24/2021

Tooling	Type	Dia.	Groundwater, ft.	
Casing			During	None
Sampler	Hand Auger	3 1/4"	End	NA
Core			Seepage	
Tube			Date	Depth, ft.
SPT Hammer				

Depth Drilled: 3.5 ft.

Component Percentages: Trace < 5%, Few 5-10%, Little 15-25%, Some 30-45%, Mostly 50-100%

QP = Calibrated Penetrometer (tons/sq. ft.)

Elev. FT.	Depth FT.	Sample Number	Recov. FT.	Dyn. Cone Eq. "N": ASTM STP 399	*USCS Group Symbol	*DESCRIPTION	QP tsf	MST %	DD pcf	REMARKS
765.2	0.25	A-1		8		18" Sandy Topsoil with occasional roots and few coarse to fine gravel				
764.9	0.50									
764.7	0.75									
764.4	1.00									
764.2	1.25									
763.9	1.50	A-2		11	SP-SM	Brown poorly graded SAND with silt; mostly coarse to fine sand, few silty fines, moist with frequent peat seams	1.5			
763.7	1.75									
763.4	2.00									
763.2	2.25									
762.9	2.50									
762.7	2.75									
762.4	3.00									
762.2	3.25									
761.9	3.50					3.5				
						End of Boring				Auger refusal at 3.5' due to possible coarse gravel / COBBLE

* Visual estimate following ASTM D 2488 unless laboratory testing has been performed. Stratification changes are approximated between samples.



LOG OF BORING

Project No.: 201675

Boring No.: B-8

Sheet: 1 of 1

Project: Schoolgirl's Glen - Nichols Drive Culvert Replacement

Client: Fishbeck

Location: Ann Arbor, Michigan

Drill Type: Hand Auger

Crew Chief: Field Eng.: JS **Rev. By:** RW

Coordinates: N=285961.2 E=13297128.7 (MI South ift)

Elevation: 765.2 ft **Datum:** NAVD 88 (GPS Observation)

Notes:

Plugging Record: Backfilled borehole with compacted cuttings.

Date Begin: 02/24/2021

Date End: 02/24/2021

Tooling	Type	Dia.	Groundwater, ft.	
Casing			During	None
Sampler	Hand Auger	3 1/4"	End	NA
Core			Seepage	
Tube			Date	Depth, ft.
SPT Hammer				

Depth Drilled: 3.0 ft.

Component Percentages: Trace < 5%, Few 5-10%, Little 15-25%, Some 30-45%, Mostly 50-100%

QP = Calibrated Penetrometer (tons/sq. ft.)

Elev. FT.	Depth FT.	Sample Number	Recov. FT.	Dyn. Cone Eq. "N": ASTM STP 399	*USCS Group Symbol	*DESCRIPTION	QP tsf	MST %	DD pcf	REMARKS
765.0	0.25	A-1		7		18" Sandy Topsoil with occasional roots and few coarse to fine gravel				
764.7	0.50									
764.5	0.75									
764.2	1.00									
764.0	1.25									
763.7	1.50									
763.5	1.75	A-2		11	SP-SM	Brown poorly graded SAND with silt; mostly coarse to fine sand, few silty fines, moist with frequent peat seams	1.5			
763.2	2.00									
763.0	2.25									
762.7	2.50									
762.5	2.75									
762.2	3.00									

End of Boring

Auger refusal at 3.0' due to possible coarse gravel / COBBLE

* Visual estimate following ASTM D 2488 unless laboratory testing has been performed. Stratification changes are approximated between samples.



SUMMARY OF LABORATORY TEST DATA

Boring Number	Sample No.*	Sample Depth (ft)	Sample Description (USCS Symbol)	Natural Moisture Content (%)	Organic Material (%)
B-1	S-1	0-1.5	CL	11.5	
B-1	S-2	3.5-5	SC	11.2	
B-1	S-3	6-7.5	OL	31.8	3.9
B-1	S-5	13.5-15	SC	39.3	4.5
B-2	S-1	0-1.5	CL	16.9	
B-2	S-2	3.5-5	SC	25.5	
B-2	S-3	6-7.5	OL	71.0	8.3
B-2	S-4	8.5-10	SC	13.0	

* S – Split Spoon Sample (ASTM D 1586)

PROJECT NO.: 201675
PAGE: 1 OF 1



NOTICE OF AUTHORIZATION

Permit Number: WRP029128 v. 1

Date Issued: June 21, 2021

Site Name: 81 - School Girl's Glen - Nichols Drive Culvert

Expiration Date: June 21, 2026

The Michigan Department of Environment, Great Lakes, and Energy (EGLE), Water Resources Division, P.O. Box 30458, Lansing, Michigan 48909-7958, under provisions of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, specifically:

- Part 31, Floodplain Regulatory Authority of the Water Resources Protection.
- Part 301, Inland Lakes and Streams.
- Part 303, Wetlands Protection.
- Part 315, Dam Safety.
- Part 323, Shorelands Protection and Management.
- Part 325, Great Lakes Submerged Lands.
- Part 353, Sand Dunes Protection and Management.

Authorized Activities: Remove the existing two culverts, and construct a 40.0 foot long, 8.0-foot span, 3.0 foot rise concrete box culverts at the School Girl's Glen-Nichols Drive crossing of a tributary of the Huron River. Construct cascade grade control structures over 125 linear feet of channel upstream of the culvert, and construct three step-pool grade control structures over 90 linear feet of the channel downstream of the culvert. Place one cubic yards of riprap erosion protection at the sanitary sewer structure at the upstream end of the project. Place 90 cubic yards of material within the 100-year floodplain of the Huron River. All activities shall be completed in accordance with approved plans, and conditions of this permit.

To be conducted at property located in Washtenaw County, Waterbody: Tributary of the Huron River; Huron River, Section 28, Town 02S, Range 06E, City of Ann Arbor

Permittee:
City of Ann Arbor
301 East Huron Street
Ann Arbor, Michigan 48104

John Skubinna
Transportation Review Unit
Water Resources Division
517-256-1469

*This notice must be displayed at the site of work.
Laminating this notice or utilizing sheet protectors is recommended.*
Please refer to the above permit number with any questions or concerns.



**MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY
WATER RESOURCES DIVISION PERMIT**

Issued To:

**City of Ann Arbor
301 East Huron Street
Ann Arbor, Michigan 48104**

Permit No: WRP029128 v.1
Submission No.: HP7-NZAW-J7AC0
Site Name: 81 - School Girl's Glen - Nichols Drive Culvert
Issued: June 21, 2021
Revised:
Expires: June 21, 2026

This permit is being issued by the Michigan Department of Environment, Great Lakes, and Energy (EGLE), Water Resources Division, under the provisions of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA); specifically:

- | | |
|---|---|
| <input checked="" type="checkbox"/> Part 301, Inland Lakes and Streams | <input type="checkbox"/> Part 323, Shorelands Protection and Management |
| <input type="checkbox"/> Part 303, Wetlands Protection | <input type="checkbox"/> Part 325, Great Lakes Submerged Lands |
| <input type="checkbox"/> Part 315, Dam Safety | <input type="checkbox"/> Part 353, Sand Dunes Protection and Management |
| <input checked="" type="checkbox"/> Part 31, Water Resources Protection (Floodplain Regulatory Authority) | |

Permission is hereby granted, based on permittee assurance of adherence to State of Michigan requirements and permit conditions, to:

Authorized Activities: Remove the existing two culverts, and construct a 40.0 foot long, 8.0-foot span, 3.0 foot rise concrete box culverts at the School Girl's Glen-Nichols Drive crossing of a tributary of the Huron River. Construct cascade grade control structures over 125 linear feet of channel upstream of the culvert, and construct three step-pool grade control structures over 90 linear feet of the channel downstream of the culvert. Place one cubic yards of riprap erosion protection at the sanitary sewer structure at the upstream end of the project. Place 90 cubic yards of material within the 100-year floodplain of the Huron River. All activities shall be completed in accordance with approved plans, and conditions of this permit.

Waterbody Affected: Tributary of the Huron River; Huron River
Property Location: Washtenaw County, City of Ann Arbor, Town/Range/Section 02S06E28
Property Tax No.

Authority granted by this permit is subject to the following limitations:

- A. Initiation of any work on the permitted project confirms the permittee's acceptance and agreement to comply with all terms and conditions of this permit.
- B. The permittee, in exercising the authority granted by this permit, shall not cause unlawful pollution as defined by Part 31 of the NREPA.

- C. This permit shall be kept at the site of the work and available for inspection at all times during the duration of the project or until its date of expiration.
- D. All work shall be completed in accordance with the approved plans and specifications submitted with the application and/or plans and specifications attached to this permit.
- E. No attempt shall be made by the permittee to forbid the full and free use by the public of public waters at or adjacent to the structure or work approved.
- F. It is made a requirement of this permit that the permittee give notice to public utilities in accordance with 2013 PA 174 (Act 174) and comply with each of the requirements of Act 174.
- G. This permit does not convey property rights in either real estate or material, nor does it authorize any injury to private property or invasion of public or private rights, nor does it waive the necessity of seeking federal assent, all local permits, or complying with other state statutes.
- H. This permit does not prejudice or limit the right of a riparian owner or other person to institute proceedings in any circuit court of this state when necessary, to protect his rights.
- I. Permittee shall notify EGLE within one week after the completion of the activity authorized by this permit.
- J. This permit shall not be assigned or transferred without the written approval of EGLE.
- K. Failure to comply with conditions of this permit may subject the permittee to revocation of permit and criminal and/or civil action as cited by the specific state act, federal act, and/or rule under which this permit is granted.
- L. All dredged or excavated materials shall be disposed of in an upland site (outside of floodplains, unless exempt under Part 31 of the NREPA, and wetlands).
- M. In issuing this permit, EGLE has relied on the information and data that the permittee has provided in connection with the submitted application for permit. If, subsequent to the issuance of a permit, such information and data prove to be false, incomplete, or inaccurate, EGLE may modify, revoke, or suspend the permit, in whole or in part, in accordance with the new information.
- N. The permittee shall indemnify and hold harmless the State of Michigan and its departments, agencies, officials, employees, agents, and representatives for any and all claims or causes of action arising from acts or omissions of the permittee, or employees, agents, or representative of the permittee, undertaken in connection with this permit. The permittee's obligation to indemnify the State of Michigan applies only if the state: (1) provides the permittee or its designated representative written notice of the claim or cause of action within 30 days after it is received by the state, and (2) consents to the permittee's participation in the proceeding on the claim or cause of action. It does not apply to contested case proceedings under the Administrative Procedures Act, 1969 PA 306, as amended, challenging the permit. This permit shall not be construed as an indemnity by the State of Michigan for the benefit of the permittee or any other person.
- O. Noncompliance with these terms and conditions and/or the initiation of other regulated activities not specifically authorized shall be cause for the modification, suspension, or revocation of this permit, in whole or in part. Further, EGLE may initiate criminal and/or civil proceedings as may be deemed necessary to correct project deficiencies, protect natural resource values, and secure compliance with statutes.
- P. If any change or deviation from the permitted activity becomes necessary, the permittee shall request, in writing, a revision of the permitted activity from EGLE. Such revision request shall include complete documentation supporting the modification and revised plans detailing the proposed modification. Proposed modifications must be approved, in writing, by EGLE prior to being implemented.
- Q. This permit may be transferred to another person upon written approval of EGLE. The permittee must submit a written request to EGLE to transfer the permit to the new owner. The new owner must also submit a written request to EGLE to accept transfer. The new owner must agree, in writing, to accept all conditions of the permit. A single letter signed by both parties that includes all the above information may be provided to EGLE. EGLE will review the request and, if approved, will provide written notification to the new owner.
- R. Prior to initiating permitted construction, the permittee is required to provide a copy of the permit to the contractor(s) for review. The property owner, contractor(s), and any agent involved in exercising the permit are held responsible to ensure that the project is constructed in accordance with all drawings and specifications. The contractor is required to provide a copy of the permit to all subcontractors doing work authorized by the permit.

- S. Construction must be undertaken and completed during the dry period of the wetland. If the area does not dry out, construction shall be done on equipment mats to prevent compaction of the soil.
- T. Authority granted by this permit does not waive permit requirements under Part 91, Soil Erosion and Sedimentation Control, of the NREPA, or the need to acquire applicable permits from the County Enforcing Agent (CEA).
- U. Authority granted by this permit does not waive permit requirements under the authority of Part 305, Natural Rivers, of the NREPA. A Natural Rivers Zoning Permit may be required for construction, land alteration, streambank stabilization, or vegetation removal along or near a natural river.
- V. The permittee is cautioned that grade changes resulting in increased runoff onto adjacent property is subject to civil damage litigation.
- W. Unless specifically stated in this permit, construction pads, haul roads, temporary structures, or other structural appurtenances to be placed in a wetland or on bottomland of the water body are not authorized and shall not be constructed unless authorized by a separate permit or permit revision granted in accordance with the applicable law.
- X. For projects with potential impacts to fish spawning or migration, no work shall occur within fish spawning or migration timelines (i.e., windows) unless otherwise approved in writing by the Michigan Department of Natural Resources, Fisheries Division.
- Y. Work to be done under authority of this permit is further subject to the following special instructions and specifications:
1. Authority granted by this permit does not waive permit or program requirements under Part 91 of the NREPA or the need to acquire applicable permits from the CEA. To locate the Soil Erosion Program Administrator for your county, visit www.mi.gov/eglestormwater and select "Soil Erosion and Sedimentation Control Program" under "Related Links."
 2. The authority to conduct the activity as authorized by this permit is granted solely under the provisions of the governing act as identified above. This permit does not convey, provide, or otherwise imply approval of any other governing act, ordinance, or regulation, nor does it waive the permittee's obligation to acquire any local, county, state, or federal approval or authorization necessary to conduct the activity.
 3. No fill, excess soil, or other material shall be placed in any wetland, floodplain, or surface water area not specifically authorized by this permit, its plans, and specifications.
 4. This permit does not authorize or sanction work that has been completed in violation of applicable federal, state, or local statutes.
 5. The permit placard shall be kept posted at the work site in a prominent location at all times for the duration of the project or until permit expiration.
 6. This permit is being issued for the maximum time allowed and no extensions of this permit will be granted. Initiation of the construction work authorized by this permit indicates the permittee's acceptance of this condition. The permit, when signed by EGLE, will be for a five-year period beginning on the date of issuance. If the project is not completed by the expiration date, a new permit must be sought.
 7. This permit does not authorize or sanction work that has been completed in violation of applicable federal, state, or local statutes.
 8. The permittee is responsible for acquiring all necessary easements or rights-of-way before commencing any work authorized by this permit. All construction operations relating to or part of this project shall be confined to the existing right-of-way limits or other acquired easements.
 9. Temporary soil erosion and sedimentation control measures shall be installed before or upon commencement of the earth change and shall be maintained daily. Temporary soil erosion and sedimentation control measures shall be maintained until permanent soil erosion and sedimentation control measures are in place and the area is stabilized. Permanent soil erosion and sedimentation control measures for all slopes, channels, ditches, or any disturbed area shall be installed within five (5) calendar days after final grading, or the final earth change has been completed.

10. All raw areas in uplands resulting from the permitted construction activity shall be effectively stabilized with sod and/or seed and mulch (or other technology specified by this permit or project plans) in a sufficient quantity and manner to prevent erosion and any potential siltation to surface waters or wetlands. Temporary stabilization measures shall be installed before or upon commencement of the permitted activity and shall be maintained until permanent measures are in place. Permanent measures shall be in place within five (5) days of achieving final grade.
11. All raw earth within 100 feet of a lake, stream, or wetland that is not brought to final stabilization by the end of the active growing season shall be temporarily stabilized with mulch blankets in accordance with the following dates: September 20th for the Upper Peninsula, October 1st for the Lower Peninsula north of US-10, and October 10th for the Lower Peninsula south of US-10.
12. This permit placard shall be kept posted at the work site, in a prominent location at all times for the duration of the project, or until permit expiration.
13. This permit is being issued for the maximum time allowed and no extensions of this permit will be granted. Initiation of the construction work authorized by this permit indicates the permittee's acceptance of this condition. The permit, when signed by EGLE, will be for a five-year period beginning at the date of issuance. If the project is not completed by the expiration date, a new permit must be sought.
14. All dredge/excavated spoils including organic and inorganic soils, vegetation, and other material removed shall be placed on upland (non-wetland, non-floodplain or non-bottomland), prepared for stabilization, revegetated and reseeded with native Michigan species appropriate to the site, and mulched in such a manner so as to prevent and ensure against erosion of any material into any waterbody, wetland, or floodplain.
15. During removal or repair of the existing structures, every precaution shall be taken to prevent debris from entering any watercourse. Any debris reaching the watercourse during the removal and/or reconstruction of the structure shall be immediately retrieved from the water. All material shall be disposed of in an acceptable manner consistent with local, state, and federal regulations.
16. Prior to the removal of the existing structures, cofferdams of steel sheet piling, gravel bags, clean stone, coarse aggregate, concrete or other acceptable barriers shall be installed to isolate all construction activity from the water. The barriers shall be maintained in good working order throughout the duration of the project. Upon project completion, the accumulated materials shall be removed and disposed of at an upland site.
17. All cofferdam and temporary steel sheet pile shall then be removed in its entirety, unless specifically shown to be left in plan on the accepted plans. Cofferdam and sheet pile that is left in place shall be cut off at the elevation shown on the plans and shall be a minimum of one foot below the stream bottom.
18. The existing structure shall be kept open to pass flow during removal of the existing road fill.
19. The placement of the new culvert and the initial placement of fill in the watercourse shall be done immediately after removal of the existing culvert. The placement shall be conducted in such a manner that all flow is immediately passed through the new culverts, allowing the major placement of fill to be done in the dry or in still water where erosion and sedimentation will be minimized. The fill material used in this initial placement shall be washed gravel, coarse aggregate, or rock and shall be placed at both ends of the culvert to a level above normal water level before backfill material is placed.
20. The culvert shall be installed to align with the center line of the existing watercourse at both the inlet and outlet ends and must be buried below the bed to provide a natural channel substrate through the structure as shown on the approved plans.
21. Road fill side slopes shall not be steeper than 1-on-2 (1 vertical to 2 horizontal) except where headwalls of reinforced concrete, mortar masonry, dry masonry, or other acceptable methods are used.
22. Road fill side slopes terminating in the watercourses and any raw banks resulting from the construction shall be stabilized with temporary measures in accordance with appropriate Best Management

Practices based on site conditions, and if necessary, may be riprapped extending above the ordinary high-water mark, before or upon commencement of the permitted activity. Temporary stabilization measures shall be maintained until permanent measures are in place.

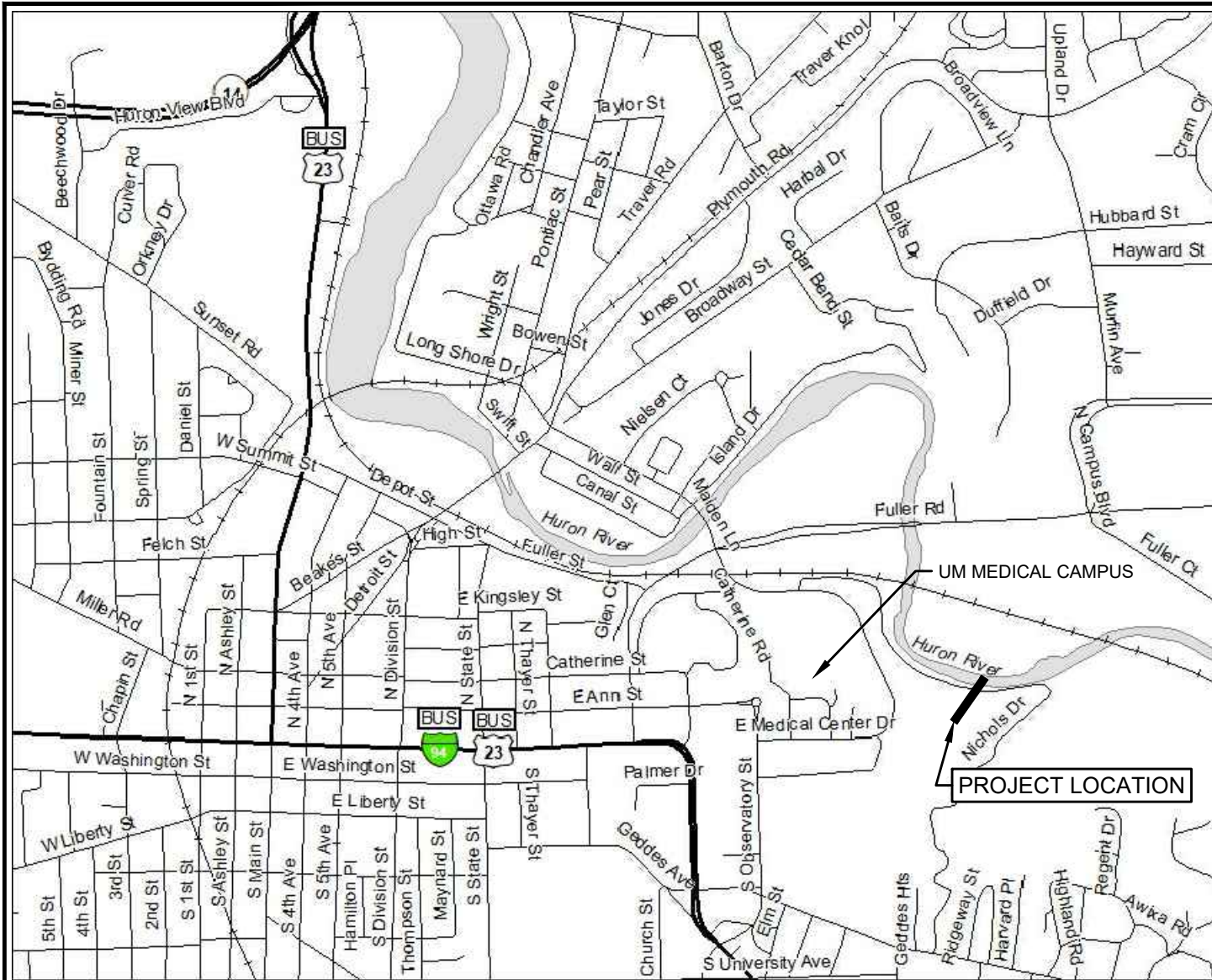
23. All other road fill slopes, ditches, and other raw areas draining directly to the watercourse may be protected with riprap, sod and/or seed and mulch as may be necessary to provide effective erosion protection. The placement of riprap shall be limited to the minimum necessary to ensure proper stabilization of the side slopes and fill in the immediate vicinity of the structure.
24. If the project, or any portion of the project, is stopped and lies incomplete for any length of time other than that encountered in a normal work week, every precaution shall be taken to protect the incomplete work from erosion, including the placement of temporary gravel bag riprap, temporary seed and mulch, or other acceptable temporary protection.
25. No work shall be done in the watercourse during periods of above-normal flows except as necessary to prevent erosion.
26. No work or dredging within the water authorized by this permit is allowed from May 1 to June 30 due to critical spawning, migration, and/or recreational use periods.



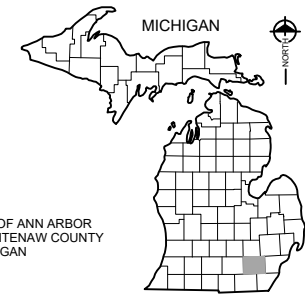
Issued By: _____

John Skubinna
Transportation Review Unit
Water Resources Division
517-256-1469

cc: Washtenaw County Drain Commissioner
Washtenaw CEA
Ms. Cheryl Pitchford, Fishbeck
Mr. Matt Konieczki, EGLE
Ms. Melissa Letosky, EGLE



VICINITY MAP



CITY OF ANN ARBOR
WASHTENAW COUNTY
MICHIGAN

SHEET INDEX

- 1 PROJECT LOCATION
- 2 OVERALL PLAN VIEW
- 3 PROFILE VIEW
- 4 SECTION DETAILS
- 5 SECTION DETAILS
- 6 CASCADING ROCK CHANNEL DETAIL
- 7 CASCADING ROCK CHANNEL WEIR DETAIL
- 8 FIELDSTONE SPILLWAY
- 9 PLUNGE POOL COMPLEX DETAILS
- 10 PLUNGE POOL COMPLEX DETAILS



NORTH

SCHOOLGIRLS' GLEN CULVERT
PROJECT LOCATION

NO SCALE

PROJECT: SCHOOLGIRLS' GLEN CULVERT REPLACEMENT PROJECT
 APPLICANT: CITY OF ANN ARBOR, WASHTENAW COUNTY, MICHIGAN
 WATERWAY: TRIBUTARY TO HURON RIVER
 LOCATION: CITY OF ANN ARBOR, WASHTENAW COUNTY, MICHIGAN
 SHEET: 1 OF 10 DATE: 5/18/2021

PREPARED FOR EGLE PERMIT APPLICATION
NOT FOR CONSTRUCTION

PROPOSED 30'Lx8'Wx3'H
BOX CULVERT WITH
HEADWALL AND WINGWALL
147 CY FILL ABOVE OHWM
62 CY CUT ABOVE OHWM
49 CY FILL BELOW OHWM
54 CY CUT BELOW OHWM
168 CY FILL ABOVE FLOODPLAIN
93 CY CUT ABOVE FLOODPLAIN
29 CY FILL BELOW FLOODPLAIN
23 CY CUT BELOW FLOODPLAIN

CASCADING ROCK CHANNEL WITH
WEIR GRADE CONTROL
58'x8'x2.7'
46 CY FILL BELOW OHWM
153 CY CUT BELOW OHWM
46 CY FILL ABOVE FLOODPLAIN
153 CY CUT ABOVE FLOODPLAIN

WEIR FIELDSTONE STABILIZATION
3'x4.5'x2'
1 CY FILL BELOW OHWM
1 CY CUT BELOW OHWM
1 CY FILL ABOVE FLOODPLAIN
1 CY CUT ABOVE FLOODPLAIN

FIELDSTONE SPILLWAY
12'x8'x1'
3.5 CY FILL BELOW OHWM
3.5 CY FILL ABOVE FLOODPLAIN

PLUNGE POOL COMPLEX
47'x14'x2.5'
63 CY FILL BELOW OHWM
36 CY CUT BELOW OHWM
63 CY FILL BELOW FLOODPLAIN
36 CY CUT BELOW FLOODPLAIN

REMOVE
EXISTING HEADWALL
FUNCTIONAL CULVERT
EXISTING 30" RCP CULVERT
REMOVE

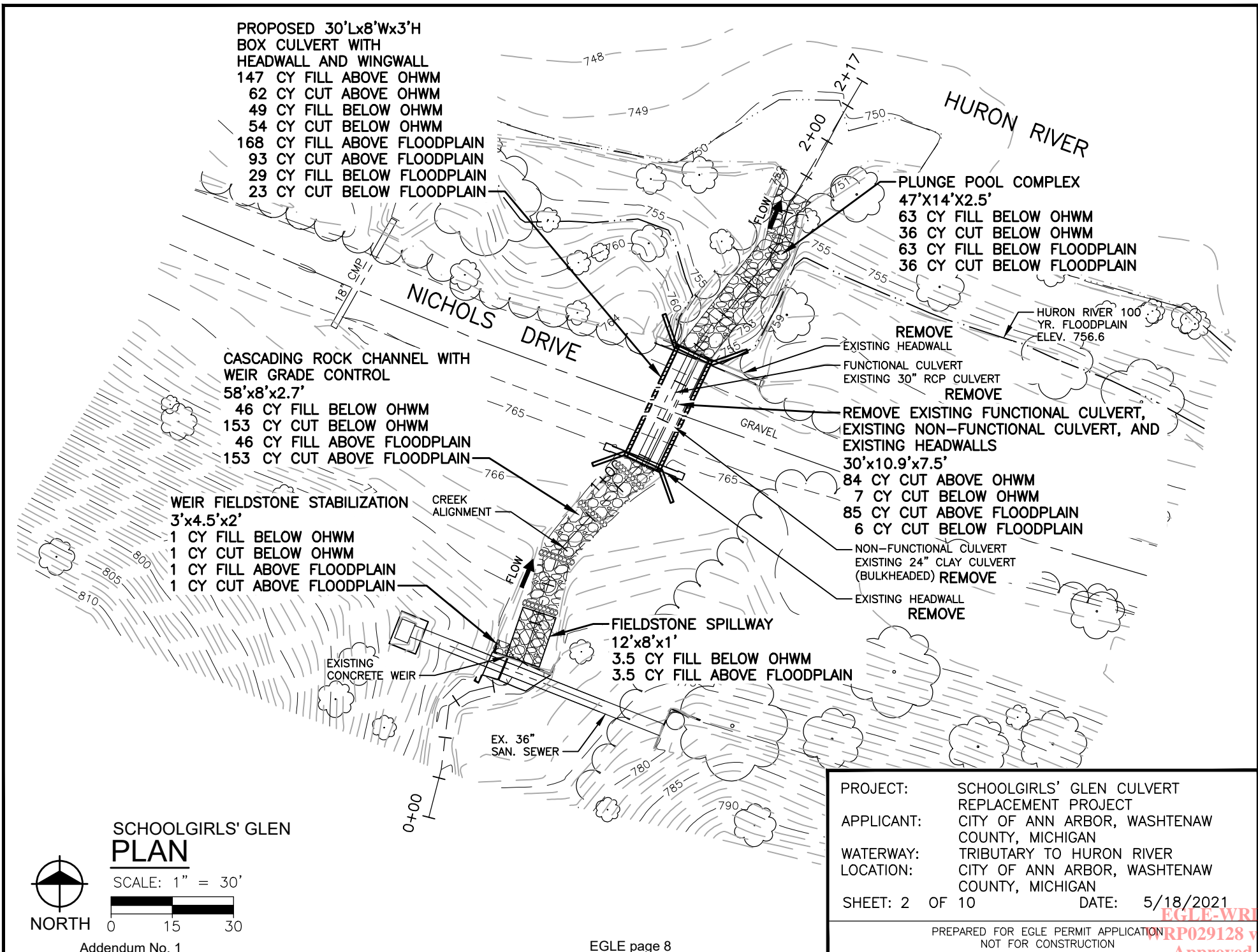
REMOVE EXISTING FUNCTIONAL CULVERT,
EXISTING NON-FUNCTIONAL CULVERT, AND
EXISTING HEADWALLS

30'x10.9'x7.5'
84 CY CUT ABOVE OHWM
7 CY CUT BELOW OHWM
85 CY CUT ABOVE FLOODPLAIN
6 CY CUT BELOW FLOODPLAIN

NON-FUNCTIONAL CULVERT
EXISTING 24" CLAY CULVERT
(BULKHEADED) REMOVE

EXISTING HEADWALL
REMOVE

HURON RIVER 100
YR. FLOODPLAIN
ELEV. 756.6



SCHOOLGIRLS' GLEN
PLAN

SCALE: 1" = 30'



NORTH



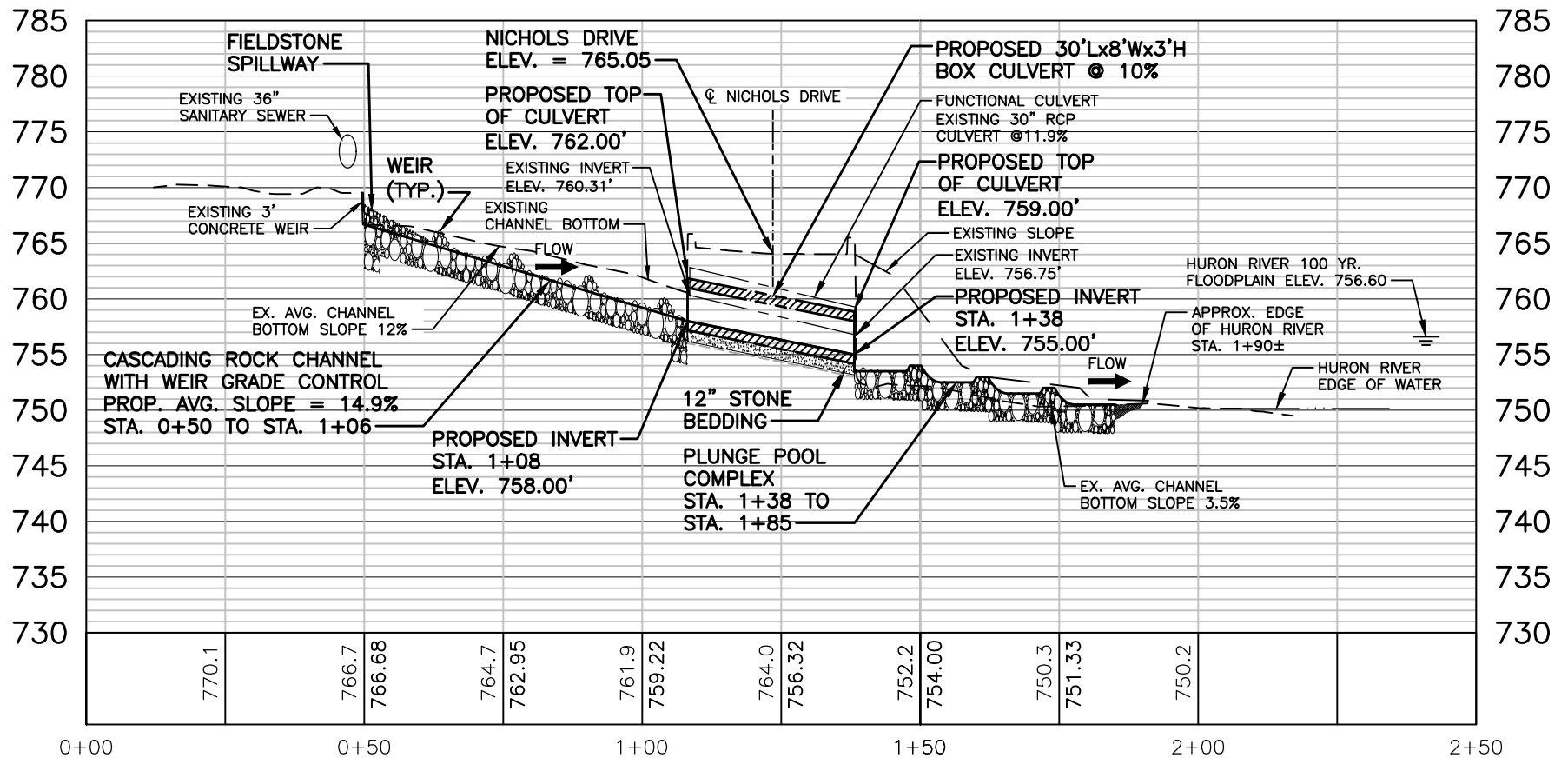
Addendum No. 1
08/27/21

EGLE page 8

PROJECT: SCHOOLGIRLS' GLEN CULVERT
REPLACEMENT PROJECT
APPLICANT: CITY OF ANN ARBOR, WASHTENAW
COUNTY, MICHIGAN
WATERWAY: TRIBUTARY TO HURON RIVER
LOCATION: CITY OF ANN ARBOR, WASHTENAW
COUNTY, MICHIGAN
SHEET: 2 OF 10 DATE: 5/18/2021

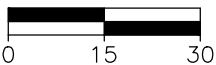
PREPARED FOR EGLE PERMIT APPLICATION
NOT FOR CONSTRUCTION

EGLE-WRP
WRP029128 v1.0
Approved
Issued On:06/21/2021
Expires On:06/21/2026



**SCHOOLGIRLS' GLEN
PROFILE**

SCALE: 1" = 30'



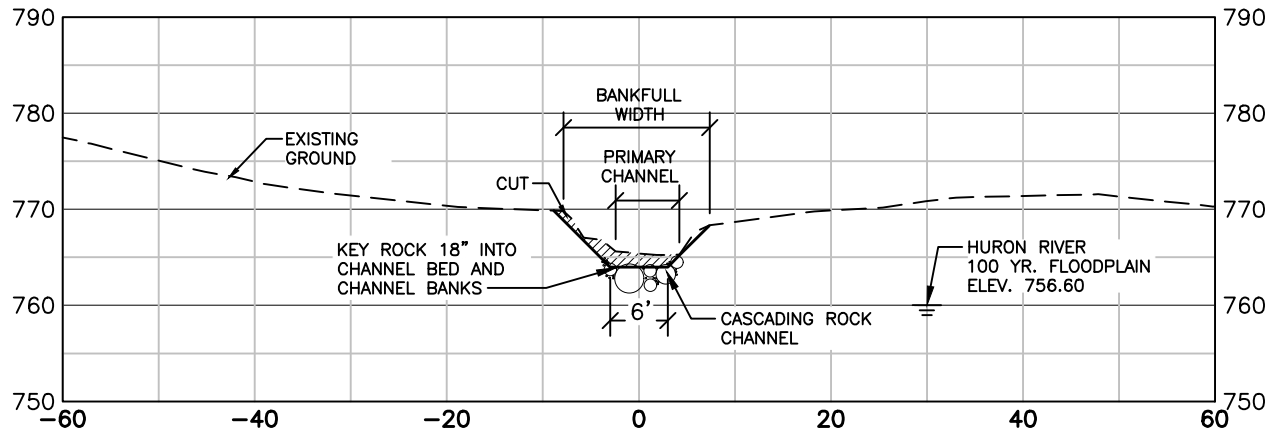
VERT. SCALE: 1" = 15'

Addendum No. 1
08/27/21

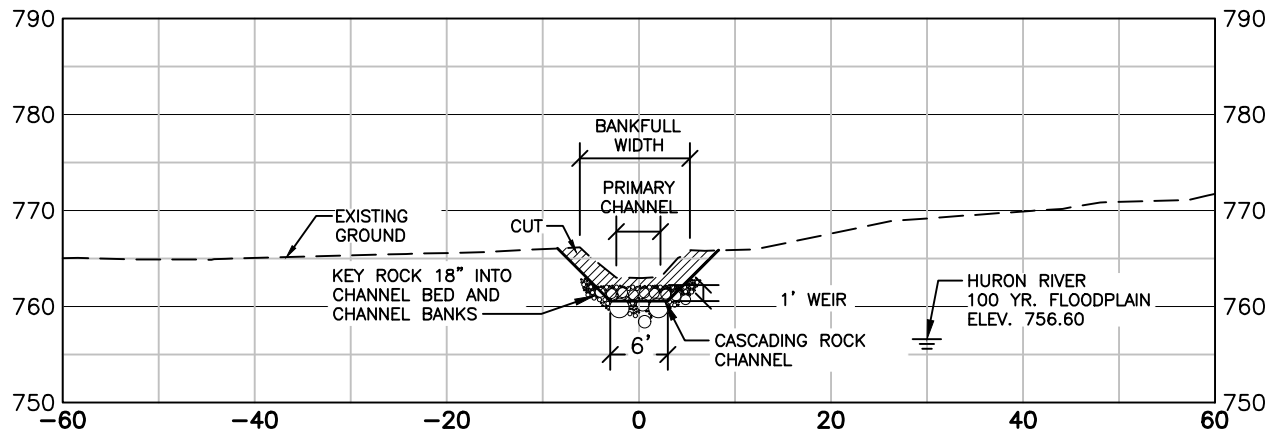
PROJECT: SCHOOLGIRLS' GLEN CULVERT REPLACEMENT PROJECT
 APPLICANT: CITY OF ANN ARBOR, WASHTENAW COUNTY, MICHIGAN
 WATERWAY: TRIBUTARY TO HURON RIVER
 LOCATION: CITY OF ANN ARBOR, WASHTENAW COUNTY, MICHIGAN
 SHEET: 3 OF 10 DATE: 5/18/2021

PREPARED FOR EGLE PERMIT APPLICATION
 NOT FOR CONSTRUCTION
 WRP029128 v1.0
 Approved

Issued On: 06/21/2021
 Expires On: 06/21/2026



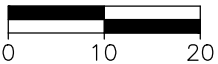
STATION 0+68
LOOKING DOWNSTREAM



STATION 0+78
LOOKING DOWNSTREAM

**SCHOOLGIRLS' GLEN
SECTIONS**

SCALE: 1" = 20'



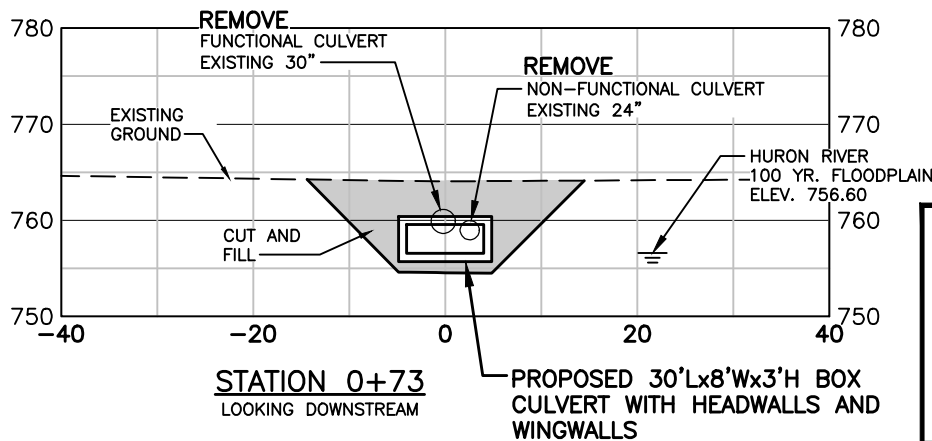
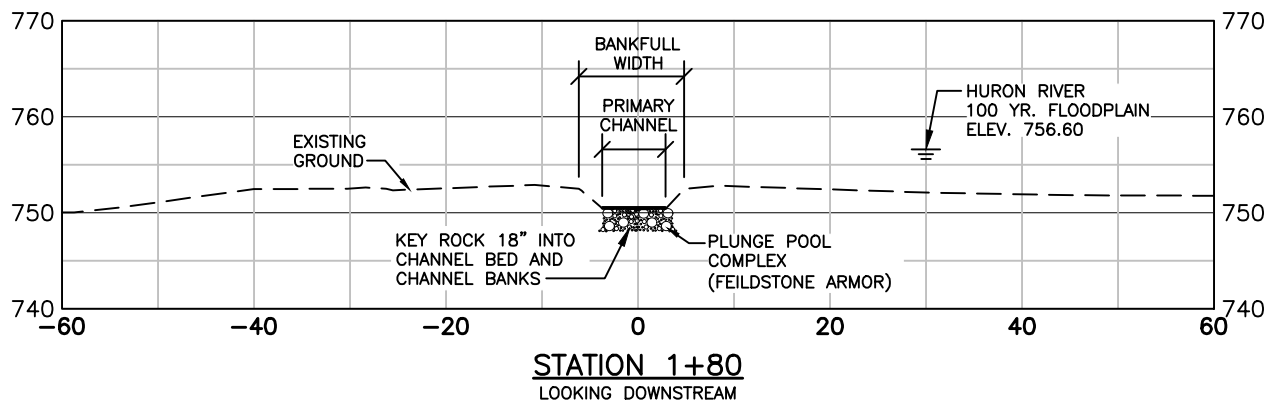
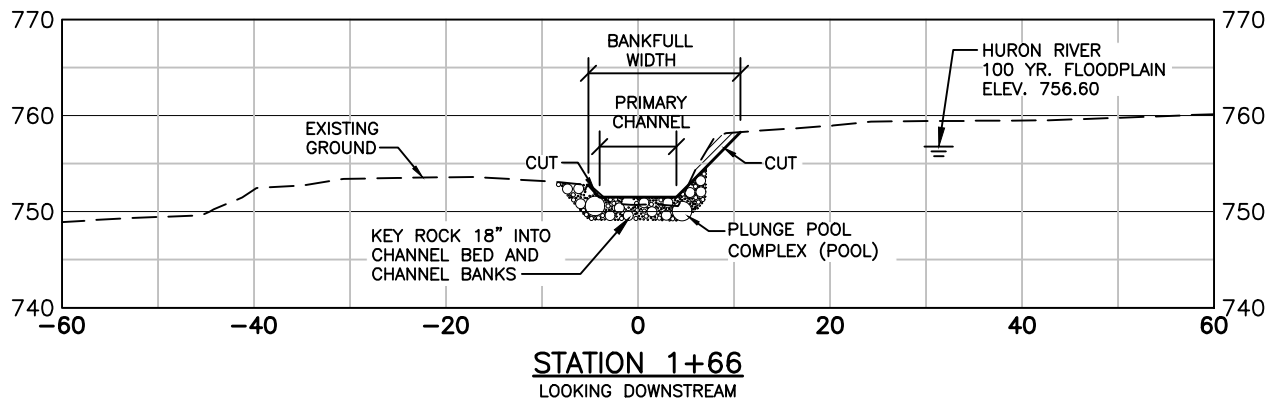
VERT. SCALE: 1" = 20'

Addendum No. 1
08/27/21

PROJECT: SCHOOLGIRLS' GLEN CULVERT
REPLACEMENT PROJECT
APPLICANT: CITY OF ANN ARBOR, WASHTENAW
COUNTY, MICHIGAN
WATERWAY: TRIBUTARY TO HURON RIVER
LOCATION: CITY OF ANN ARBOR, WASHTENAW
COUNTY, MICHIGAN
SHEET: 4 OF 10 DATE: 5/18/2021

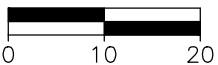
PREPARED FOR EGLE PERMIT APPLICATION
NOT FOR CONSTRUCTION

EGLE-WRP
WRP029128 v1.0
Approved
Issued On:06/21/2021
Expires On:06/21/2026



**SCHOOLGIRLS' GLEN
SECTIONS**

SCALE: 1" = 20'



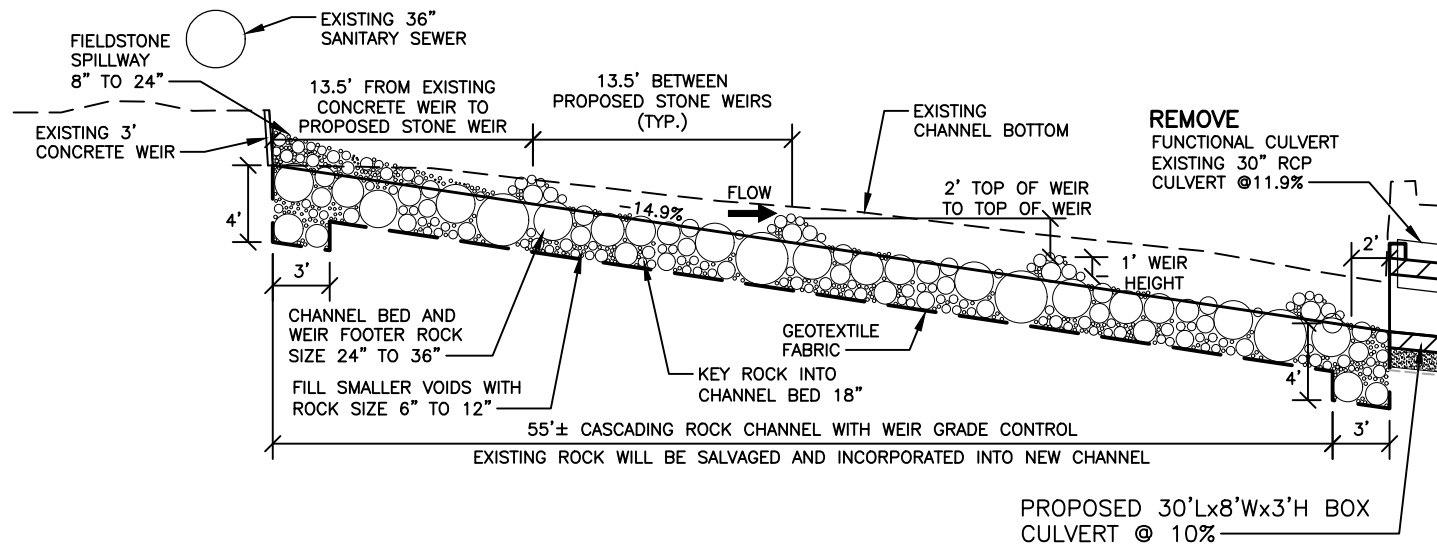
VERT. SCALE: 1" = 20'

Addendum No. 1
08/27/21

PROJECT: SCHOOLGIRLS' GLEN CULVERT REPLACEMENT PROJECT
 APPLICANT: CITY OF ANN ARBOR, WASHTENAW COUNTY, MICHIGAN
 WATERWAY: TRIBUTARY TO HURON RIVER
 LOCATION: CITY OF ANN ARBOR, WASHTENAW COUNTY, MICHIGAN
 SHEET: 5 OF 10 DATE: 5/18/2021

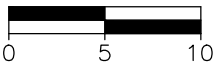
PREPARED FOR EGLE PERMIT APPLICATION WRP029128 v1.0
 NOT FOR CONSTRUCTION

EGLE-WRP
 Approved
 Issued On:06/21/2021
 Expires On:06/21/2026



SCHOOLGIRLS' GLEN
CASCADING ROCK CHANNEL DETAIL

SCALE: 1" = 10'



VERT. SCALE: 1" = 10'

Addendum No. 1

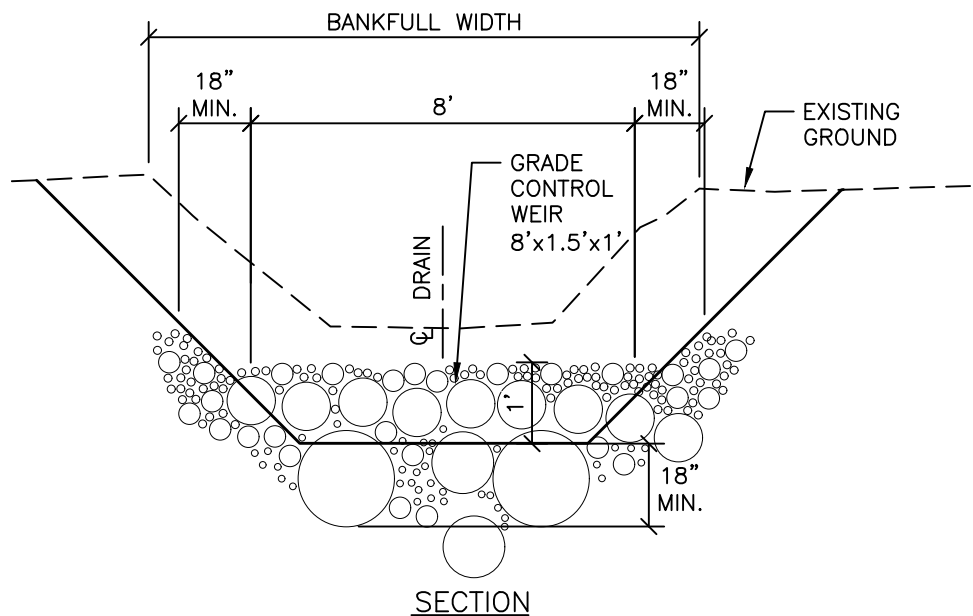
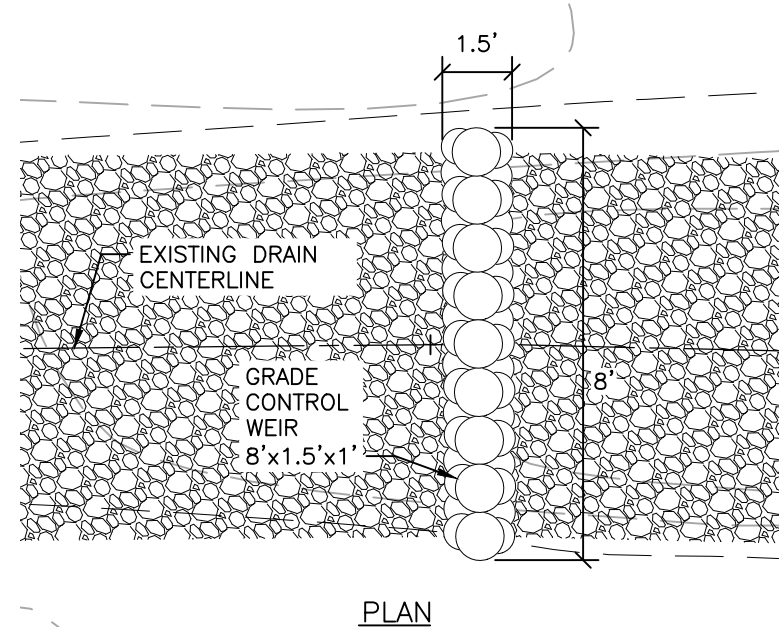
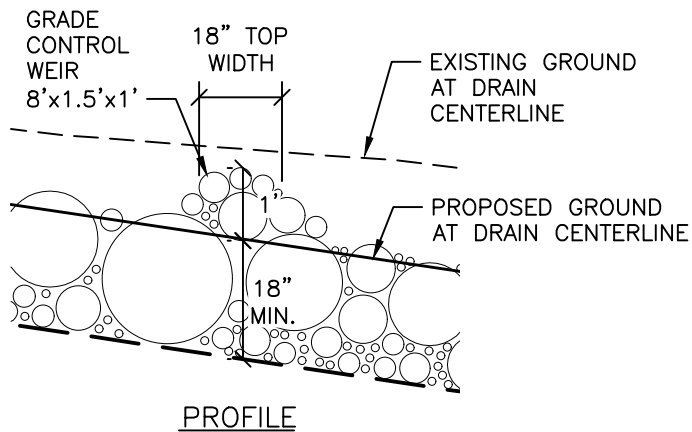
08/27/21

EGL E page 12

PROJECT:	SCHOOLGIRLS' GLEN CULVERT REPLACEMENT PROJECT
APPLICANT:	CITY OF ANN ARBOR, WASHTENAW COUNTY, MICHIGAN
WATERWAY:	TRIBUTARY TO HURON RIVER
LOCATION:	CITY OF ANN ARBOR, WASHTENAW COUNTY, MICHIGAN
SHEET: 6 OF 10	DATE: 5/18/2021

PREPARED FOR EGL E PERMIT APPLICATION NOT FOR CONSTRUCTION

EGLE-WRP
 WRP029128 v1.0
 Approved
 Issued On:06/21/2021
 Expires On:06/21/2026



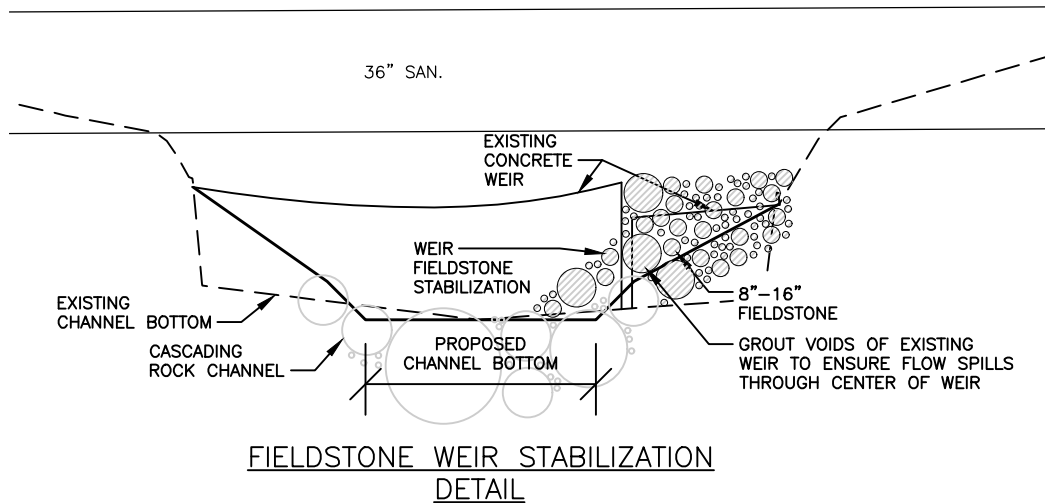
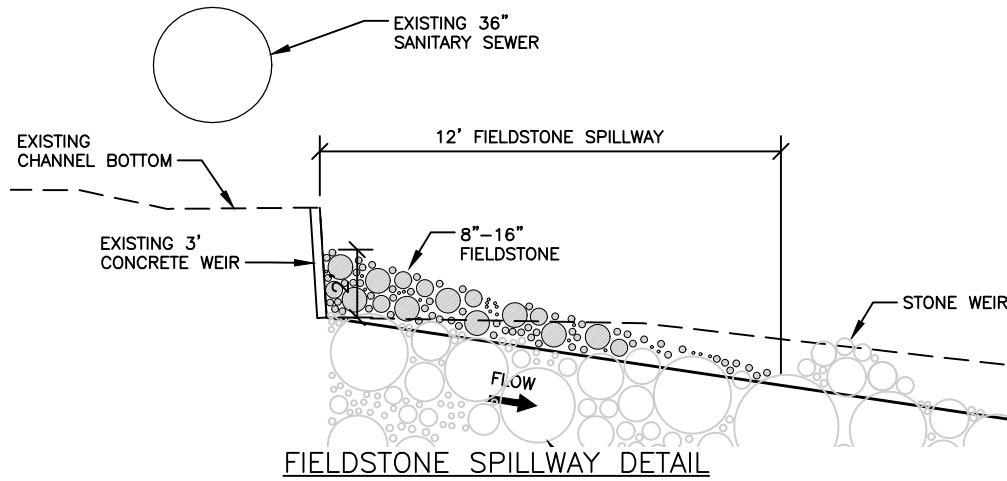
SCHOOLGIRLS' GLEN
CASCADING ROCK CHANNEL WEIR DETAIL

NO SCALE
 Addendum No. 1
 08/27/21

PROJECT: SCHOOLGIRLS' GLEN CULVERT REPLACEMENT PROJECT
 APPLICANT: CITY OF ANN ARBOR, WASHTENAW COUNTY, MICHIGAN
 WATERWAY: TRIBUTARY TO HURON RIVER
 LOCATION: CITY OF ANN ARBOR, WASHTENAW COUNTY, MICHIGAN
 SHEET: 7 OF 10 DATE: 5/18/2021

PREPARED FOR EGLE PERMIT APPLICATION
 NOT FOR CONSTRUCTION

EGLE-WRP
 WRP029128 v1.0
 Approved
 Issued On:06/21/2021
 Expires On:06/21/2026



SCHOOLGIRLS' GLEN
FIELDSTONE SPILLWAY AND FIELDSTONE WEIR STABILIZATION DETAILS

NO SCALE

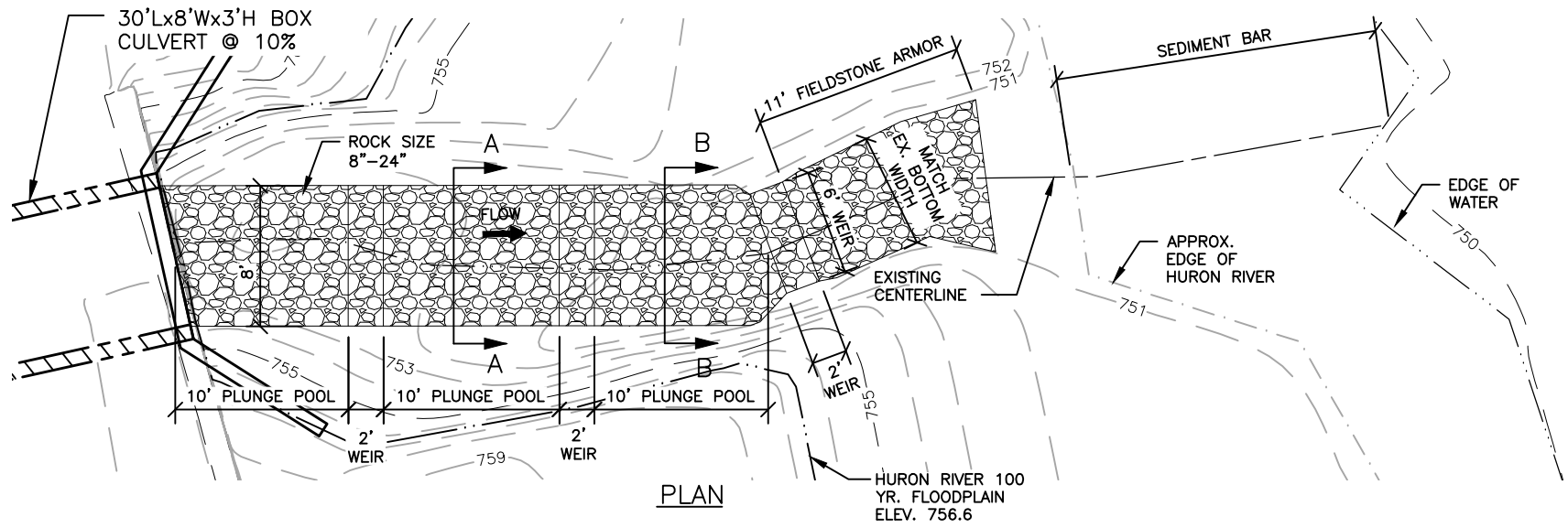
Addendum No. 1
 08/27/21

EGLE page 14

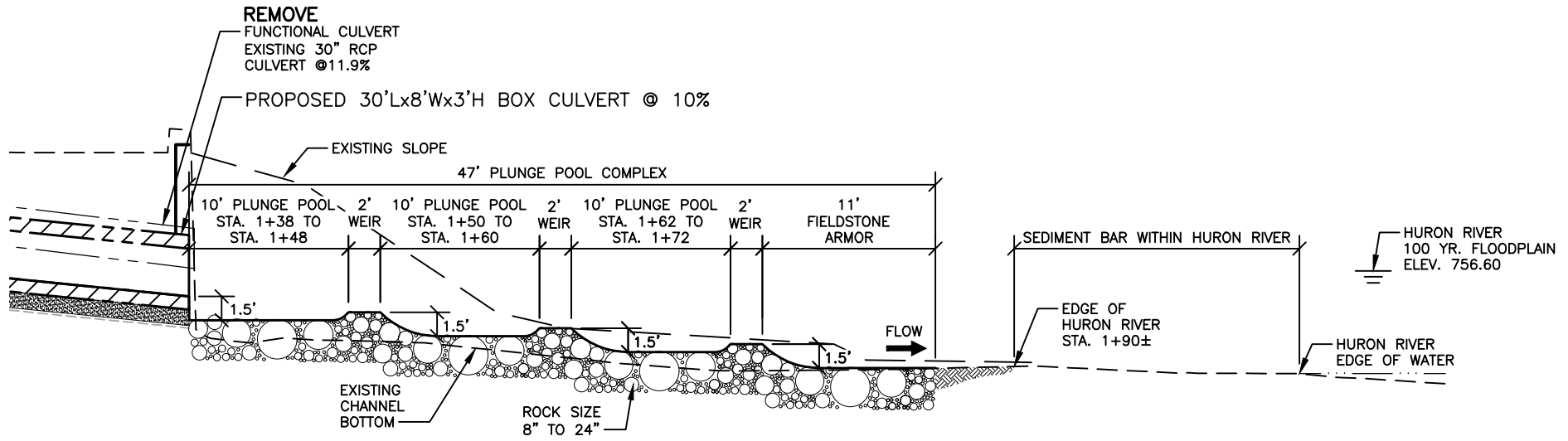
PROJECT:	SCHOOLGIRLS' GLEN CULVERT REPLACEMENT PROJECT
APPLICANT:	CITY OF ANN ARBOR, WASHTENAW COUNTY, MICHIGAN
WATERWAY:	TRIBUTARY TO HURON RIVER
LOCATION:	CITY OF ANN ARBOR, WASHTENAW COUNTY, MICHIGAN
SHEET: 8 OF 10	DATE: 5/18/2021

PREPARED FOR EGLE PERMIT APPLICATION
 NOT FOR CONSTRUCTION

EGLE-WRP
 WRP029128 v1.0
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 Issued On:06/21/2021
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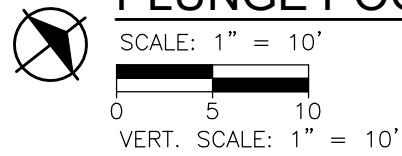


PLAN



PROFILE

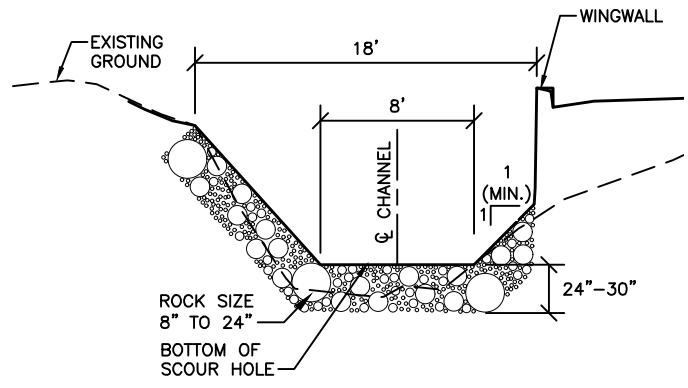
SCHOOL GIRLS' GLEN
PLUNGE POOL COMPLEX DETAILS



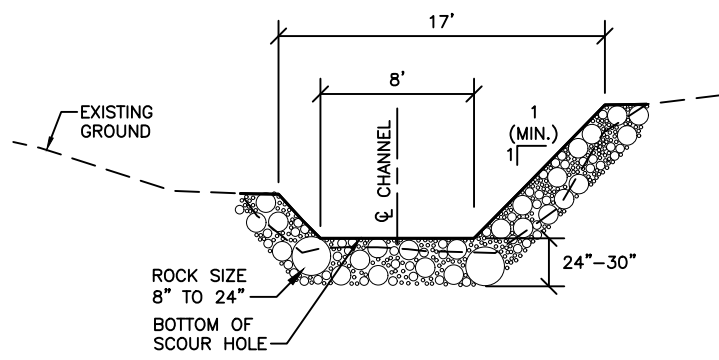
Addendum No. 1
 08/27/21

PROJECT:	SCHOOLGIRLS' GLEN CULVERT REPLACEMENT PROJECT
APPLICANT:	CITY OF ANN ARBOR, WASHTENAW COUNTY, MICHIGAN
WATERWAY:	TRIBUTARY TO HURON RIVER
LOCATION:	CITY OF ANN ARBOR, WASHTENAW COUNTY, MICHIGAN
SHEET: 9 OF 10	DATE: 5/18/2021
PREPARED FOR EGLE PERMIT APPLICATION NOT FOR CONSTRUCTION	

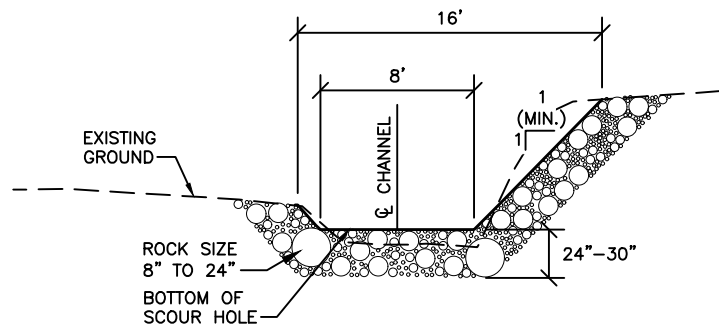
EGLE-WRP
 WRP029128 v1.0
 Approved
 Issued On:06/21/2021
 Expires On:06/21/2026



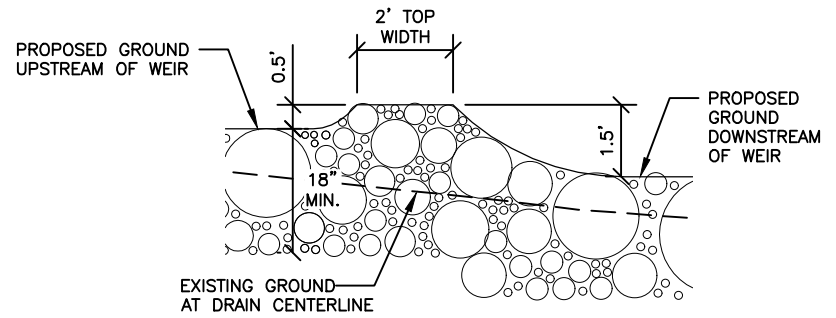
PLUNGE POOL SECTION A



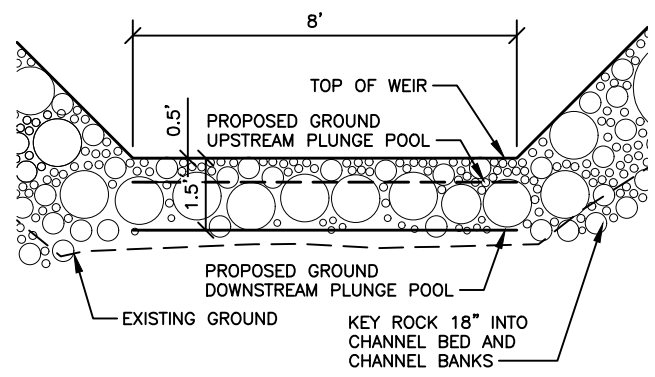
PLUNGE POOL SECTION B



PLUNGE POOL SECTION C



WEIR PROFILE



WEIR SECTION

SCHOOL GIRLS' GLEN
PLUNGE POOL COMPLEX DETAILS

NO SCALE
 Addendum No. 1
 08/27/21

PROJECT:	SCHOOLGIRLS' GLEN CULVERT REPLACEMENT PROJECT
APPLICANT:	CITY OF ANN ARBOR, WASHTENAW COUNTY, MICHIGAN
WATERWAY:	TRIBUTARY TO HURON RIVER
LOCATION:	CITY OF ANN ARBOR, WASHTENAW COUNTY, MICHIGAN
SHEET: 10 OF 10	DATE: 5/18/2021
PREPARED FOR EGLE PERMIT APPLICATION NOT FOR CONSTRUCTION	

EGLE-WRP
 WRP029128 v1.0
 Approved
 Issued On:06/21/2021
 Expires On:06/21/2026

PREBID MEETING SIGN-IN SHEET

**PROJECT: Schoolgirls Glen Culvert Replacement
ITB #4689
Thursday, August 19, 2021**

PLEASE PRINT

NAME	REPRESENTING	MAILING ADDRESS (optional)	TELEPHONE (optional)	EMAIL
Brian Slizewski	City of Ann Arbor - Engineering	Address: 301 E. Huron Street, P.O. Box 8647 City, State: Ann Arbor, MI Zip: 48107-8647	Office: (734) 794-6410, x43607 Cell: (734) 231-6376	bslizewski@a2gov.org
Paul Kammer	Fishbeck (Designers)	Address: City, State: Zip:	Office: Cell:	pkammer@fishbeck.com
Elizabeth Spencer	U of M Arboretum	Address: City, State: Zip:	Office: Cell:	espenc@umich.edu
ERIC Stahley	Hoffman Bros's	Address: 8574 Verona Rd City, State: Battle Creek Zip: 49014	Office: 269 965 1207 Cell: 517 795 3722	estahley@HoffmanBrosInc.com
John Schmitt	TRI-CITY GRANDBREAKERS	Address: 4440 N. EASTMAN RD City, State: MIDLAND, MI Zip: 48642	Office: 989-232-0600 Cell: 989-239-2149	John@tricitygroundbreakers.com
Mike Leppke	Fishbeck	Address: City, State: Zip:	Office: 248-324-4746 Cell:	mtleppke@fishbeck.com
BRIAN MCKISSEN	FISHBECK	Address: City, State: Zip:	Office: 248-324-1572 Cell:	BLMCKISSEN@FISHBECK.COM
FERNANDO CAZARES	DIPONIO	Address: City, State: Zip:	Office: Cell:	fcazares@diponioContracting.com

PREBID MEETING SIGN-IN SHEET

PROJECT: Schoolgirls Glen Culvert Replacement
ITB #4689
Thursday, August 19, 2021

MEETING SIGN-IN SHEET PLEASE PRINT

NAME	REPRESENTING	MAILING ADDRESS	TELEPHONE	EMAIL
Mike Haussler	Miller Bros. Const. Inc.	Address:	Office:	mikehaussler@ mbcholdings.com
		City, State: Zip:	Cell: 734-260-1732	
		Address:	Office:	
		City, State: Zip:	Cell:	
		Address:	Office:	
		City, State: Zip:	Cell:	
		Address:	Office:	
		City, State: Zip:	Cell:	
		Address:	Office:	
		City, State: Zip:	Cell:	
		Address:	Office:	
		City, State: Zip:	Cell:	
		Address:	Office:	
		City, State: Zip:	Cell:	
		Address:	Office:	
		City, State: Zip:	Cell:	

Z:\2019\191660\CAD\C004191660.dwg Dwg Created: 10-Aug-21 - standard (reduced).ctb - Plot Date: 10-Aug-21

MISS DIG 811
 3 full working days before you dig:
 1-800-482-7171
 on the web at: www.missdig.org

811
 Know what's below.
 Call before you dig.

BENCHMARKS

BENCH MARK G ELEVATION: 779.28
 CHISELED SQUARE ON NORTHEASTERLY CORNER OF CONCRETE SANITARY VAULT ON WEST SIDE OF CREEK.
 BENCH MARK H ELEVATION: 766.37
 MAG SPIKE ON NORTHERLY SIDE OF 18" DECIDUOUS TREE ON SOUTH SIDE OF NICHOLS DRIVE AND ± 100' EAST OF CREEK.

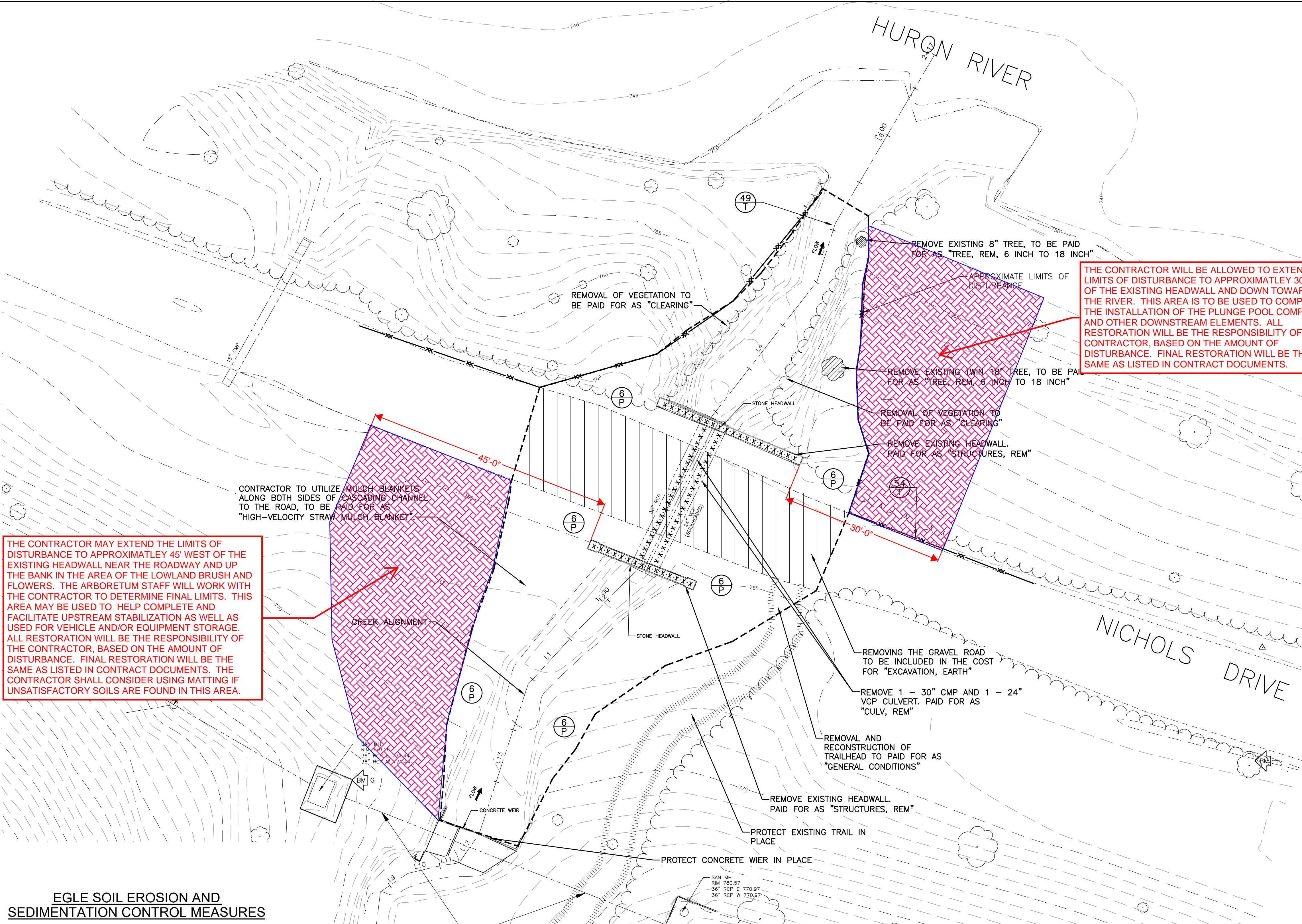
LEGEND

- X-X-X-X- REMOVE STRUCTURE OR UTILITY
- X REMOVE OBJECT
- [Hatched Box] REMOVE GRAVEL PAVEMENT
- - - - - APPROXIMATE LIMITS OF DISTURBANCE
- [Circle with X] TREE, REM
- [Star] TREE, REM

NOTES

1. THE EXTENT OF REMOVALS AND DEMOLITION SHALL BE FIELD VERIFIED BY CONSTRUCTION MANAGER PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF ANY DEVIATIONS FROM INFORMATION SHOWN.
2. PRIOR TO CONSTRUCTION ALL FENCING, BARRICADES, ENCLOSURES, ETC., MUST BE INSTALLED AND APPROVED BY OWNER OR CONSTRUCTION MANAGER.
3. DISPOSE OF DEMOLITION AND EXCAVATION MATERIALS IN ACCORDANCE WITH CONTRACT DOCUMENTS.
4. UNLESS SPECIFICALLY NOTED FOR REMOVAL ON THE PLANS, ALL SIDEWALKS, DRIVES, CULVERTS, DRAINAGE STRUCTURES, AND ABOVE AS WELL AS BELOW GRADE UTILITIES SHALL BE PROTECTED. ALL SUCH ITEMS DAMAGED OR DESTROYED DURING CONSTRUCTION SHALL BE REMOVED AND REPLACED WITH NEW AT NO ADDITIONAL COST TO THE OWNER.
5. PERFORM CLEARING, GRUBBING, TREE AND STUMP REMOVAL, TOPSOIL REMOVAL AND STOCKPILING IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
6. THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THIS DRAWING HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. VERIFY CRITICAL INVERT INFORMATION PRIOR TO BEGINNING CONSTRUCTION.
7. DAMAGE CAUSED TO SURROUNDING AREA PAVEMENT OUTSIDE THE CONSTRUCTION LIMITS SHALL BE SAWCUT AND REPLACED AT NO ADDITIONAL COST TO THE OWNER.
8. 100 SY OF 8"-24" FIELDSTONE AND 100 SY OF TOP SOIL IS INCLUDED AS CONTINGENCY PAY ITEM TO BE PLACED AS DIRECTED BY ENGINEER.

SURVEY PERFORMED BY:
 FISHBECK INC.
 39500 MACKENZIE DRIVE, SUITE 100
 NOV, MI 48377
 DATE: 1/21/2021
 517.882.0383 PHONE
 517.882.0388 FAX
 www.fishbeck.com



THE CONTRACTOR MAY EXTEND THE LIMITS OF DISTURBANCE TO APPROXIMATELY 45' WEST OF THE EXISTING HEADWALL NEAR THE ROADWAY AND UP THE BANK IN THE AREA OF THE LOWLAND BRUSH AND FLOWERS. THE ARBORETUM STAFF WILL WORK WITH THE CONTRACTOR TO DETERMINE FINAL LIMITS. THIS AREA MAY BE USED TO HELP COMPLETE AND FACILITATE UPSTREAM STABILIZATION AS WELL AS USED FOR VEHICLE AND/OR EQUIPMENT STORAGE. ALL RESTORATION WILL BE THE RESPONSIBILITY OF THE CONTRACTOR, BASED ON THE AMOUNT OF DISTURBANCE. FINAL RESTORATION WILL BE THE SAME AS LISTED IN CONTRACT DOCUMENTS. THE CONTRACTOR SHALL CONSIDER USING MATTING IF UNSATISFACTORY SOILS ARE FOUND IN THIS AREA.

THE CONTRACTOR WILL BE ALLOWED TO EXTEND THE LIMITS OF DISTURBANCE TO APPROXIMATELY 30' EAST OF THE EXISTING HEADWALL AND DOWN TOWARDS THE RIVER. THIS AREA IS TO BE USED TO COMPLETE THE INSTALLATION OF THE PLUNGE POOL COMPLEX AND OTHER DOWNSTREAM ELEMENTS. ALL RESTORATION WILL BE THE RESPONSIBILITY OF THE CONTRACTOR, BASED ON THE AMOUNT OF DISTURBANCE. FINAL RESTORATION WILL BE THE SAME AS LISTED IN CONTRACT DOCUMENTS.

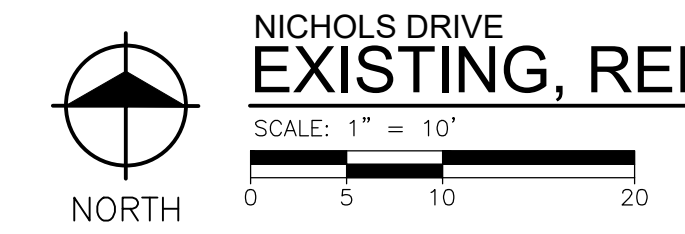
EGLS SOIL EROSION AND SEDIMENTATION CONTROL MEASURES

KEY	DETAIL	CHARACTERISTICS
6	Seeding with Mulch and/or Matting	Facilitates establishment of vegetative cover. Effective for drainageways with low velocity. Easily placed in small quantities by inexperienced personnel. Should include prepared topsoil bed.
49	Check Dams	Reduces flow velocity. Catches sediment. Can be constructed of logs, straw, hay, rock, lumber, masonry or sand bags.
54	Geotextile Silt Fence	Use geotextile and posts or poles. May be constructed or prepackaged. Easy to construct and locate as necessary.

XX TEMPORARY MEASURE
 YY PERMANENT MEASURE

* DATES ARE APPROXIMATE AND WILL BE REVISED AT PRECONSTRUCTION MEETING.

SESC SCHEDULE AND SEQUENCING	JAN 2021	FEB 2021	MAR 2021	APR 2021
INSTALL PROTECTIVE FENCING AND SILT FENCE	[Bar]			
INSTALL CATCH BASIN FILTERS	[Bar]			
CONSTRUCT SEDIMENT TRAP AND CHECK DAM	[Bar]			
INSTALL DRAIN BYPASS PLAN	[Bar]			
CLEAR AND GRUB	[Bar]	[Bar]	[Bar]	[Bar]
REMOVALS	[Bar]	[Bar]	[Bar]	[Bar]
PARTIAL WIDTH CONSTRUCTION		[Bar]	[Bar]	[Bar]
INSTALL PROPOSED CULVERT		[Bar]	[Bar]	[Bar]
BACKFILL SUBGRADE		[Bar]	[Bar]	[Bar]
SITE PAVING			[Bar]	[Bar]
LANDSCAPE AND FINAL RESTORATION			[Bar]	[Bar]



CITY OF ANN ARBOR
 PUBLIC SERVICE
 301 EAST HURON STREET
 ANN ARBOR, MI 48107-8647
 734-794-6410
 www.a2gov.org

PUBLIC SERVICES-ENGINEERING - CITY OF ANN ARBOR
 SCHOOL GIRLS GLEN CULVERT REPLACEMENT - NICHOLS DRIVE
 EXISTING, REMOVAL, AND SESC MEASURES

SCALE PLAN:
 DRAWING No. 2021-XXX-4
 SHEET No. 4

CITY OF ANN ARBOR PREVAILING WAGE DECLARATION OF COMPLIANCE

The "wage and employment requirements" of Section 1:320 of Chapter 14 of Title I of the Ann Arbor City Code mandates that the city not enter any contract, understanding or other arrangement for a public improvement for or on behalf of the city unless the contract provides that all craftsmen, mechanics and laborers employed directly on the site in connection with said improvements, including said employees of subcontractors, shall receive the prevailing wage for the corresponding classes of craftsmen, mechanics and laborers, as determined by statistics for the Ann Arbor area compiled by the United States Department of Labor. Where the contract and the Ann Arbor City Code are silent as to definitions of terms required in determining contract compliance with regard to prevailing wages, the definitions provided in the Davis-Bacon Act as amended (40 U.S.C. 278-a to 276-a-7) for the terms shall be used. Further, to the extent that any employees of the contractor providing services under this contract are not part of the class of craftsmen, mechanics and laborers who receive a prevailing wage in conformance with section 1:320 of Chapter 14 of Title I of the Code of the City of Ann Arbor, employees shall be paid a prescribed minimum level of compensation (i.e. Living Wage) for the time those employees perform work on the contract in conformance with section 1:815 of Chapter 23 of Title I of the Code of the City of Ann Arbor.

At the request of the city, any contractor or subcontractor shall provide satisfactory proof of compliance with this provision.

The Contractor agrees:

- (a) To pay each of its employees whose wage level is required to comply with federal, state or local prevailing wage law, for work covered or funded by this contract with the City,
- (b) To require each subcontractor performing work covered or funded by this contract with the City to pay each of its employees the applicable prescribed wage level under the conditions stated in subsection (a) or (b) above.
- (c) To provide to the City payroll records or other documentation within ten (10) business days from the receipt of a request by the City.
- (d) To permit access to work sites to City representatives for the purposes of monitoring compliance, and investigating complaints or non-compliance.

The undersigned states that he/she has the requisite authority to act on behalf of his/her employer in these matters and has offered to provide the services in accordance with the terms of the wage and employment provisions of the Chapter 14 of the Ann Arbor City Code. The undersigned certifies that he/she has read and is familiar with the terms of Section 1:320 of Chapter 14 of the Ann Arbor City Code and by executing this Declaration of Compliance obligates his/her employer and any subcontractor employed by it to perform work on the contract to the wage and employment requirements stated herein. The undersigned further acknowledges and agrees that if it is found to be in violation of the wage and employment requirements of Section 1:320 of the Chapter 14 of the Ann Arbor City Code it shall be deemed a material breach of the terms of the contract and grounds for termination of same by the City.

Hoffman Bros Inc
Company Name

[Signature] 9/2/21
Signature of Authorized Representative Date

Bill Rizer Secretary
Print Name and Title

8574 Verona Rd Battlecreek, MI 49014
Address, City, State, Zip

269 965 1207 brizer@hoffmanbrosinc.com
Phone/Email address

Questions about this form? Contact Procurement Office City of Ann Arbor Phone: 734/794-6500

CITY OF ANN ARBOR
LIVING WAGE ORDINANCE DECLARATION OF COMPLIANCE

The Ann Arbor Living Wage Ordinance (Section 1:811-1:821 of Chapter 23 of Title I of the Code) requires that an employer who is (a) a contractor providing services to or for the City for a value greater than \$10,000 for any twelve-month contract term, or (b) a recipient of federal, state, or local grant funding administered by the City for a value greater than \$10,000, or (c) a recipient of financial assistance awarded by the City for a value greater than \$10,000, shall pay its employees a prescribed minimum level of compensation (i.e., Living Wage) for the time those employees perform work on the contract or in connection with the grant or financial assistance. The Living Wage must be paid to these employees for the length of the contract/program.

Companies employing fewer than 5 persons and non-profits employing fewer than 10 persons are exempt from compliance with the Living Wage Ordinance. If this exemption applies to your company/non-profit agency please check here No. of employees__

The Contractor or Grantee agrees:

- (a) To pay each of its employees whose wage level is not required to comply with federal, state or local prevailing wage law, for work covered or funded by a contract with or grant from the City, no less than the Living Wage. The current Living Wage is defined as \$14.05/hour for those employers that provide employee health care (as defined in the Ordinance at Section 1:815 Sec. 1 (a)), or no less than \$15.66/hour for those employers that do not provide health care. The Contractor or Grantor understands that the Living Wage is adjusted and established annually on April 30 in accordance with the Ordinance and covered employers shall be required to pay the adjusted amount thereafter to be in compliance with Section 1:815(3).

Check the applicable box below which applies to your workforce

- Employees who are assigned to any covered City contract/grant will be paid at or above the applicable living wage without health benefits
- Employees who are assigned to any covered City contract/grant will be paid at or above the applicable living wage with health benefits

- (b) To post a notice approved by the City regarding the applicability of the Living Wage Ordinance in every work place or other location in which employees or other persons contracting for employment are working.
- (c) To provide to the City payroll records or other documentation within ten (10) business days from the receipt of a request by the City.
- (d) To permit access to work sites to City representatives for the purposes of monitoring compliance, and investigating complaints or non-compliance.
- (e) To take no action that would reduce the compensation, wages, fringe benefits, or leave available to any employee covered by the Living Wage Ordinance or any person contracted for employment and covered by the Living Wage Ordinance in order to pay the living wage required by the Living Wage Ordinance.

The undersigned states that he/she has the requisite authority to act on behalf of his/her employer in these matters and has offered to provide the services or agrees to accept financial assistance in accordance with the terms of the Living Wage Ordinance. The undersigned certifies that he/she has read and is familiar with the terms of the Living Wage Ordinance, obligates the Employer/Grantee to those terms and acknowledges that if his/her employer is found to be in violation of Ordinance it may be subject to civil penalties and termination of the awarded contract or grant of financial assistance.

Hoffman Bros Inc
Company Name

8574 Verona Rd
Street Address

[Signature]
Signature of Authorized Representative

9/2/21
Date

Battle Creek, MI 49014
City, State, Zip

Bill Rizor Secretary
Print Name and Title

(269) 965-1207 brizor@hoffmanbrosinc.com
Phone/Email address

**CITY OF ANN ARBOR
LIVING WAGE ORDINANCE**

RATE EFFECTIVE APRIL 30, 2021 - ENDING APRIL 29, 2022

\$14.05 per hour

If the employer provides health care benefits*

\$15.66 per hour

If the employer does **NOT** provide health care benefits*

Employers providing services to or for the City of Ann Arbor or recipients of grants or financial assistance from the City of Ann Arbor for a value of more than \$10,000 in a twelve-month period of time must pay those employees performing work on a City of Ann Arbor contract or grant, the above living wage.

ENFORCEMENT

The City of Ann Arbor may recover back wages either administratively or through court action for the employees that have been underpaid in violation of the law. Persons denied payment of the living wage have the right to bring a civil action for damages in addition to any action taken by the City.

Violation of this Ordinance is punishable by fines of not more than \$500/violation plus costs, with each day being considered a separate violation. Additionally, the City of Ann Arbor has the right to modify, terminate, cancel or suspend a contract in the event of a violation of the Ordinance.

* Health Care benefits include those paid for by the employer or making an employer contribution toward the purchase of health care. The employee contribution must not exceed \$.50 an hour for an average work week; and the employer cost or contribution must equal no less than \$1/hr for the average work week.

The Law Requires Employers to Display This Poster Where Employees Can Readily See It.

**For Additional Information or to File a Complaint contact
Colin Spencer at 734/794-6500 or cspencer@a2gov.org**



Vendor Conflict of Interest Disclosure Form

All vendors interested in conducting business with the City of Ann Arbor must complete and return the Vendor Conflict of Interest Disclosure Form in order to be eligible to be awarded a contract. Please note that all vendors are subject to comply with the City of Ann Arbor's conflict of interest policies as stated within the certification section below.

If a vendor has a relationship with a City of Ann Arbor official or employee, an immediate family member of a City of Ann Arbor official or employee, the vendor shall disclose the information required below.

1. No City official or employee or City employee's immediate family member has an ownership interest in vendor's company or is deriving personal financial gain from this contract.
2. No retired or separated City official or employee who has been retired or separated from the City for less than one (1) year has an ownership interest in vendor's Company.
3. No City employee is contemporaneously employed or prospectively to be employed with the vendor.
4. Vendor hereby declares it has not and will not provide gifts or hospitality of any dollar value or any other gratuities to any City employee or elected official to obtain or maintain a contract.
5. Please note any exceptions below:

Conflict of Interest Disclosure*	
Name of City of Ann Arbor employees, elected officials or immediate family members with whom there may be a potential conflict of interest.	<input type="checkbox"/> Relationship to employee <input type="checkbox"/> Interest in vendor's company <input type="checkbox"/> Other (please describe in box below)
None	

*Disclosing a potential conflict of interest does not disqualify vendors. In the event vendors do not disclose potential conflicts of interest and they are detected by the City, vendor will be exempt from doing business with the City.

I certify that this Conflict of Interest Disclosure has been examined by me and that its contents are true and correct to my knowledge and belief and I have the authority to so certify on behalf of the Vendor by my signature below:		
Hoffman Bros Inc.	269 965 1207	
Vendor Name	Vendor Phone Number	
	a/2/21	Bill Rizer
Signature of Vendor Authorized Representative	Date	Printed Name of Vendor Authorized Representative

**CITY OF ANN ARBOR
DECLARATION OF COMPLIANCE**

Non-Discrimination Ordinance

The "non discrimination by city contractors" provision of the City of Ann Arbor Non-Discrimination Ordinance (Ann Arbor City Code Chapter 112, Section 9:158) requires all contractors proposing to do business with the City to treat employees in a manner which provides equal employment opportunity and does not discriminate against any of their employees, any City employee working with them, or any applicant for employment on the basis of actual or perceived age, arrest record, color, disability, educational association, familial status, family responsibilities, gender expression, gender identity, genetic information, height, HIV status, marital status, national origin, political beliefs, race, religion, sex, sexual orientation, source of income, veteran status, victim of domestic violence or stalking, or weight. It also requires that the contractors include a similar provision in all subcontracts that they execute for City work or programs.

In addition the City Non-Discrimination Ordinance requires that all contractors proposing to do business with the City of Ann Arbor must satisfy the contract compliance administrative policy adopted by the City Administrator. A copy of that policy may be obtained from the Purchasing Manager

The Contractor agrees:

- (a) To comply with the terms of the City of Ann Arbor's Non-Discrimination Ordinance and contract compliance administrative policy, including but not limited to an acceptable affirmative action program if applicable.
- (b) To post the City of Ann Arbor's Non-Discrimination Ordinance Notice in every work place or other location in which employees or other persons are contracted to provide services under a contract with the City.
- (c) To provide documentation within the specified time frame in connection with any workforce verification, compliance review or complaint investigation.
- (d) To permit access to employees and work sites to City representatives for the purposes of monitoring compliance, or investigating complaints of non-compliance.

The undersigned states that he/she has the requisite authority to act on behalf of his/her employer in these matters and has offered to provide the services in accordance with the terms of the Ann Arbor Non-Discrimination Ordinance. The undersigned certifies that he/she has read and is familiar with the terms of the Non-Discrimination Ordinance, obligates the Contractor to those terms and acknowledges that if his/her employer is found to be in violation of Ordinance it may be subject to civil penalties and termination of the awarded contract.

Hoffman Bros Inc
Company Name

[Signature] 9/2/21
Signature of Authorized Representative Date

Bill Rizer Secretary
Print Name and Title

8574 Verona Rd Battle Creek, MI 49014
Address, City, State, Zip

(269) 965-1207 brizer@hoffmanbrosinc.com
Phone/Email Address

Questions about the Notice or the City Administrative Policy, Please contact:
Procurement Office of the City of Ann Arbor
(734) 794-6500

CITY OF ANN ARBOR NON-DISCRIMINATION ORDINANCE

Relevant provisions of Chapter 112, Nondiscrimination, of the Ann Arbor City Code are included below.
You can review the entire ordinance at www.a2gov.org/humanrights.

Intent: It is the intent of the city that no individual be denied equal protection of the laws; nor shall any individual be denied the enjoyment of his or her civil or political rights or be discriminated against because of actual or perceived age, arrest record, color, disability, educational association, familial status, family responsibilities, gender expression, gender identity, genetic information, height, HIV status, marital status, national origin, political beliefs, race, religion, sex, sexual orientation, source of income, veteran status, victim of domestic violence or stalking, or weight.

Discriminatory Employment Practices: No person shall discriminate in the hire, employment, compensation, work classifications, conditions or terms, promotion or demotion, or termination of employment of any individual. No person shall discriminate in limiting membership, conditions of membership or termination of membership in any labor union or apprenticeship program.

Discriminatory Effects: No person shall adopt, enforce or employ any policy or requirement which has the effect of creating unequal opportunities according to actual or perceived age, arrest record, color, disability, educational association, familial status, family responsibilities, gender expression, gender identity, genetic information, height, HIV status, marital status, national origin, political beliefs, race, religion, sex, sexual orientation, source of income, veteran status, victim of domestic violence or stalking, or weight for an individual to obtain housing, employment or public accommodation, except for a bona fide business necessity. Such a necessity does not arise due to a mere inconvenience or because of suspected objection to such a person by neighbors, customers or other persons.

Nondiscrimination by City Contractors: All contractors proposing to do business with the City of Ann Arbor shall satisfy the contract compliance administrative policy adopted by the City Administrator in accordance with the guidelines of this section. All city contractors shall ensure that applicants are employed and that employees are treated during employment in a manner which provides equal employment opportunity and tends to eliminate inequality based upon any classification protected by this chapter. All contractors shall agree not to discriminate against an employee or applicant for employment with respect to hire, tenure, terms, conditions, or privileges of employment, or a matter directly or indirectly related to employment, because of any applicable protected classification. All contractors shall be required to post a copy of Ann Arbor's Non-Discrimination Ordinance at all work locations where its employees provide services under a contract with the city.

Complaint Procedure: If any individual believes there has been a violation of this chapter, he/she may file a complaint with the City's Human Rights Commission. The complaint must be filed within 180 calendar days from the date of the individual's knowledge of the allegedly discriminatory action or 180 calendar days from the date when the individual should have known of the allegedly discriminatory action. A complaint that is not filed within this timeframe cannot be considered by the Human Rights Commission. To file a complaint, first complete the complaint form, which is available at www.a2gov.org/humanrights. Then submit it to the Human Rights Commission by e-mail (hrc@a2gov.org), by mail (Ann Arbor Human Rights Commission, PO Box 8647, Ann Arbor, MI 48107), or in person (City Clerk's Office). For further information, please call the commission at 734-794-6141 or e-mail the commission at hrc@a2gov.org.

Private Actions For Damages or Injunctive Relief: To the extent allowed by law, an individual who is the victim of discriminatory action in violation of this chapter may bring a civil action for appropriate injunctive relief or damages or both against the person(s) who acted in violation of this chapter.

THIS IS AN OFFICIAL GOVERNMENT NOTICE AND
MUST BE DISPLAYED WHERE EMPLOYEES CAN READILY SEE IT.

MICHIGAN DEPARTMENT OF TRANSPORTATION CERTIFIED PAYROLL

COMPLETION OF CERTIFIED PAYROLL FORM FULFILLS THE MINIMUM MDOT PREVAILING WAGE REQUIREMENTS

(1) NAME OF CONTRACTOR / SUBCONTRACTOR (CIRCLE ONE) (2) ADDRESS

(3) PAYROLL NO. (4) FOR WEEK ENDING (5) PROJECT AND LOCATION (6) CONTRACT ID

(a)	(b)	(c)	(d) DAY AND DATE							(e)	(f)	(g)	(h)	(i)	(j) DEDUCTIONS					(k)								
			Hour Type													TOTAL HOURS ON PROJECT	PROJECT RATE OF PAY	PROJECT RATE OF FRINGE PAY	GROSS PROJECT EARNED		GROSS WEEKLY EARNED	TOTAL WEEKLY HOURS WORKED ALL JOBS	FICA	FEDERAL	STATE	OTHER	TOTAL DEDUCT	TOTAL WEEKLY WAGES PAID FOR ALL JOBS
EMPLOYEE INFORMATION	WORK CLASSIFICATION									0											\$0.00						\$0.00	\$0.00
NAME:										0											\$0.00						\$0.00	\$0.00
ETH/GEN: ID #: GROUP/CLASS #:		S								0											\$0.00						\$0.00	\$0.00
NAME:										0											\$0.00						\$0.00	\$0.00
ETH/GEN: ID #: GROUP/CLASS #:		S								0											\$0.00						\$0.00	\$0.00
NAME:										0											\$0.00						\$0.00	\$0.00
ETH/GEN: ID #: GROUP/CLASS #:		S								0											\$0.00						\$0.00	\$0.00
NAME:										0											\$0.00						\$0.00	\$0.00
ETH/GEN: ID #: GROUP/CLASS #:		S								0											\$0.00						\$0.00	\$0.00
NAME:										0											\$0.00						\$0.00	\$0.00
ETH/GEN: ID #: GROUP/CLASS #:		S								0											\$0.00						\$0.00	\$0.00
NAME:										0											\$0.00						\$0.00	\$0.00
ETH/GEN: ID #: GROUP/CLASS #:		S								0											\$0.00						\$0.00	\$0.00
NAME:										0											\$0.00						\$0.00	\$0.00
ETH/GEN: ID #: GROUP/CLASS #:		S								0											\$0.00						\$0.00	\$0.00
NAME:										0											\$0.00						\$0.00	\$0.00

Date _____

I, _____ (Name of Signatory Party) _____ (Title)

do hereby state:

(1) That I pay or supervise the payment of the persons employed by

_____ on the _____ (Contractor or Subcontractor); that during the payroll period commencing on the _____ (Building or Work)

_____ day of _____, _____, and ending the _____ day of _____, _____, all persons employed on said project have been paid the full weekly wages earned, that no rebates have been or will be made either directly or indirectly to or on behalf of said

_____ from the full _____ (Contractor or Subcontractor)

weekly wages earned by any person and that no deductions have been made either directly or indirectly from the full wages earned by any person, other than permissible deductions as defined in Regulations, Part 3 (29 C.F.R. Subtitle A), issued by the Secretary of Labor under the Copeland Act, as amended (48 Stat. 948, 63 Stat. 108, 72 Stat. 967; 76 Stat. 357; 40 U.S.C. § 3145), and described below:

(2) That any payrolls otherwise under this contract required to be submitted for the above period are correct and complete; that the wage rates for laborers or mechanics contained therein are not less than the applicable wage rates contained in any wage determination incorporated into the contract; that the classifications set forth therein for each laborer or mechanic conform with the work he performed.

(3) That any apprentices employed in the above period are duly registered in a bona fide apprenticeship program registered with a State apprenticeship agency recognized by the Bureau of Apprenticeship and Training, United States Department of Labor, or if no such recognized agency exists in a State, are registered with the Bureau of Apprenticeship and Training, United States Department of Labor.

(4) That:

(a) WHERE FRINGE BENEFITS ARE PAID TO APPROVED PLANS, FUNDS, OR PROGRAMS

- in addition to the basic hourly wage rates paid to each laborer or mechanic listed in the above referenced payroll, payments of fringe benefits as listed in the contract have been or will be made to appropriate programs for the benefit of such employees, except as noted in section 4(c) below.

(b) WHERE FRINGE BENEFITS ARE PAID IN CASH

- Each laborer or mechanic listed in the above referenced payroll has been paid, as indicated on the payroll, an amount not less than the sum of the applicable basic hourly wage rate plus the amount of the required fringe benefits as listed in the contract, except as noted in section 4(c) below.

(c) EXCEPTIONS

EXCEPTION (CRAFT)	EXPLANATION

REMARKS:

NAME AND TITLE	SIGNATURE
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THE WILLFUL FALSIFICATION OF ANY OF THE ABOVE STATEMENTS MAY SUBJECT THE CONTRACTOR OR SUBCONTRACTOR TO CIVIL OR CRIMINAL PROSECUTION. SEE SECTION 1001 OF TITLE 18 AND SECTION 231 OF TITLE 31 OF THE UNITED STATES CODE.