

INVITATION TO BID

ITB No. 4292

BARTON DAM
RIGHT EMBANKMENT DRAINAGE
BLANKET INSTALLATION
FERC Project No. 3142

File No. 13003



Due Date: Thursday, September 5, 2013 at 2:00 PM

Issued By:

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

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ADVERTISEMENT
FOR THE
BARTON DAM
RIGHT EMBANKMENT DRAINAGE
BLANKET INSTALLATION
CITY OF ANN ARBOR

ITB NO. 4292

Sealed Bids will be received by the City of Ann Arbor Procurement Unit, 301 East Huron Street, Fifth Floor, Larcom City Hall, on or before Thursday, September 5, 2013 by 2:00 PM for the construction of Barton Dam – Right Embankment Drainage Blanket Installation. Bids will be publically opened and read aloud at this time.

A pre-bid conference will be held Tuesday, August 27, 2013 at 9:00 AM at the Water Treatment Plant located at 919 Sunset Road, Ann Arbor, Michigan 48103, followed by a site visit. Attendance is highly recommended.

Work to be done includes: miscellaneous site work, dewatering, clearing, excavation, grading and landscaping necessary to install a drainage blanket, installation of drainage blanket including geotextile filter fabric, aggregate, site restoration, and all related work.

Bid documents, plans, specifications, and addenda shall be downloaded by Bidders at either of the following websites: Michigan Inter-governmental Trade Network (MITN) www.mitn.info or City of Ann Arbor Purchasing website: www.A2gov.org. It is the Bidder's responsibility to verify they have obtained all information before submitting a bid.

Each Bid shall be accompanied by a certified check, or Bid Bond by a recognized surety, in the amount of 5% of the total of the bid price. A Bid, once submitted, becomes the property of the City. In the sole discretion of the City, the City reserves the right to allow a bidder to reclaim submitted documents provided the documents are requested and retrieved no later than 48 hours prior to the scheduled bid opening.

The successful Bidder will be required to furnish satisfactory performance and labor and material bonds in the amount of 100% of the bid price and satisfactory insurance coverage.

Precondition for entering into a Contract with the City of Ann Arbor is compliance with Chapter 112 of Title IX of the Code of the City of Ann Arbor. The successful Bidder may also be required to comply with Chapter 23 of Title I of the Code of the City of Ann Arbor. Further information is outlined in the Contract Documents.

After the time of opening, no Bid may be withdrawn for a period of 90 days. The City reserves the right 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.

Technical questions regarding this project may be submitted in writing to the Consulting Engineer, Stantec Consulting, Attn: Glen Wiczorek, PE via email at glen.wiczorek@stantec.com. Questions by telephone call are prohibited. Technical questions directed to the Owner are prohibited. The deadline for questions shall be seven (7) calendar days before bids; questions are due on or before Thursday, August 29, 2013 at 5:00 PM. Questions will not be received after this date.

Any further information on bid documents may be obtained from the Procurement Office, (734) 794-6500.

CITY OF ANN ARBOR PROCUREMENT UNIT

NOTICE OF PRE-BID CONFERENCE

A pre-bid conference for this project will be held on Tuesday, August 27, 2013 at 9:00 AM at the City of Ann Arbor Water Treatment Plant located at 919 Sunset Road, Ann Arbor, Michigan 48103. A site visit will follow the pre-bid conference to allow potential bidders the opportunity to view the project site.

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.

The City shall make available to all prospective Bidders, prior to receipt of the Bids, access to the area in which the work is to be performed. Advance notice should be given to the Administering Service Area/Unit in cases where access to the site must be arranged by the City.

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 Page Numbers ITB 1-3 and on the "Bid Forms" provided with each blank properly filled in. If forms are not fully completed it may disqualify the bid.

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 Clarification on ITB Specifications

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 submitted by Thursday, August 29, 2013 at 5:00 PM and should be addressed as follows:

Specification/Scope of Work questions emailed to glen.wiczorek@stantec.com
Bid Process and HR Compliance questions emailed to KLancaster@a2gov.org.

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 Thursday, September 5, 2013 by 2:00 PM. 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) additional Bid copies in a sealed envelope clearly marked: **ITB No. 4292 – Barton Dam – Right Embankment Drainage Blanket Installation.**

Bids must be addressed and delivered to:

City of Ann Arbor
Procurement Unit, 5th Floor
301 East Huron Street
P.O. Box 8647
Ann Arbor, MI 48107

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

Hand delivered Bids will be date/time stamped/signed by the Procurement Unit at the address above in order to be considered. Normal business hours are 9:00 a.m. to 3:00 p.m. Monday through Friday, excluding Holidays. 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.

Qualifications

The City will evaluate Proposals based on cost as well as experience. Contractors that have not included the required list of similar work experience and associated references in Section 5 of the Bid Form may have their bid rejected.

As part of the proposal, Bidders shall provide documentation that the Bidder's company has at least 5 years of experience performing construction on similar projects. Bidders shall also submit the attached form, "Section 5 – References," which identifies a minimum of three projects completed in the past five years on similar projects, including construction cost, contractor and subcontractor information, that demonstrate similar work experience and complexity to that included within these contract documents.

All key staff and subcontractors are subject to the approval by the City.

Official Documents

The City of Ann Arbor shall accept no alternates to the bid documents made by the Bidder unless those alternatives are set forth in the "Alternate" section of Bid form.

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.

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 90 days specified in the Advertisement.

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-1, 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

Section 5, beginning at page GC-3, outlines the requirements for fair employment practices under City of Ann Arbor Contracts. To establish compliance with this Ordinance, the Bidder should complete and return with its bid completed copies of the Human Rights Division Contract Compliance Forms or an acceptable equivalent. In the event Human Rights forms are not submitted with bid, the Bidder will have 24 hours to provide once requested by the City.

Wage Requirements

Section 4, beginning at page GC-2, outlines the requirements for payment of prevailing wages or of a "living wage" to employees providing service to the City under this contract. The successful bidder must comply with all applicable requirements and provide documentary proof of compliance when requested.

Major Subcontractors

The Bidder shall identify 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.

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.

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.

CONTRACT COMPLIANCE FORMS

City of Ann Arbor Procurement Office INSTRUCTIONS FOR CONTRACTORS

For Completing CONTRACT COMPLIANCE FORM

City Policy

The “non discrimination in contracts” provision of the City Code, (Chapter 112, Section 9:161) requires contractors/Bidders/grantees doing business with the City not to discriminate on the basis of actual or perceived race, color, religion, national origin, sex, age, condition of pregnancy, marital status, physical or mental limitations, source of income, family responsibilities, educational association, sexual orientation, gender identity or HIV status against any of their employees, any City employee working with them, or any applicant for employment. It also requires that the contractors/Bidders/grantees include a similar provision in all subcontracts that they execute for City work or programs.

This Ordinance further requires that each prospective contractor/Bidder submit employment data to the City showing current total employee breakdown by occupation, race and gender. This allows the Human Rights Office to determine whether or not the contractor/Bidder has a workforce that is reflective of the availability of women and under-represented minorities within the contractor’s labor recruitment area (the area where they can reasonably be expected to recruit employees). *This data is provided to the City on the Human Rights Contract Compliance Forms (attached).*

To complete the form:

1) **If a company has more than one location, then that company must complete 2 versions of the form.**

- **Form #1** should contain the employment data for the **entire corporation.**
- **Form #2** should contain the employment data for those employees:
 - who will be working on-site;
 - in the office responsible for completing the contract; or,
 - in the case of non-profit grantees, those employees working on the project funded by the City grant(s).

2) If the company has only one location, fill out Form #1 only.

3) Complete all data in the upper section of the form including the name of the person who completes the form and the name of the company/organization’s president.

4) Complete the Employment Data in the remainder of the form. Please be sure to complete all columns including the Total Columns on the far right side of the form, and the Total row and Previous Year Total row at the bottom of the form.

5) Return the completed form(s) to your contact in the City Department for whom you will be conducting the work.

For assistance in completing the form, contact:

Procurement Office of the City of Ann Arbor
(734) 794-6500

If a contractor is determined to be out of compliance, the Procurement Office will work with them to assist them in coming into compliance.

**CITY OF ANN ARBOR HUMAN RIGHTS OFFICE
CONTRACT COMPLIANCE FORM**

Form #1

Entire Organization (Totals for All Locations where applicable)

Name of Company/Organization _____ Date Form Completed _____

Name and Title of Person Completing this Form _____ Name of President _____

Address _____ County _____ Phone # _____
 (Street address) (City) (State) (Zip) (Area Code)

Fax# _____ Email Address _____
 (Area Code)

EMPLOYMENT DATA

Job Categories	Number of Employees (Report employees in only one category)												TOTAL COLUMNS A-L
	Male						Female						
	White	Black or African American	Asian	Hispanic or Latino	Native Hawaiian or Other Pacific Islander	American Indian or Alaska Native	White	Black or African American	Asian	Hispanic Latino	or Native Hawaiian or Other Pacific Islander	American Indian or Alaskan Native	
A	B	C	D	E	F	G	H	I	J	K	L		
Exec/Sr. Level Officials													
Supervisors													
Professionals													
Technicians													
Sales													
Admin. Support													
Craftspeople													
Operatives													
Service Workers													
Laborers/Helper													
Apprentices													
Other													
TOTAL													
PREVIOUS YEAR TOTAL													

**CITY OF ANN ARBOR HUMAN RIGHTS OFFICE
CONTRACT COMPLIANCE FORM**

Form #2

Local Office (Only those employees that will do local or on-site work, if applicable)

Name of Company/Organization _____ Date Form Completed _____

Name and Title of Person Completing this Form _____ Name of President _____

Address _____ County _____ Phone # _____
 (Street address) (City) (State) (Zip) (Area Code)

Fax# _____ Email Address _____
 (Area Code)

EMPLOYMENT DATA

Job Categories	Number of Employees (Report employees in only one category)												TOTAL COLUMNS A-L
	Male						Female						
	White	Black or African American	Asian	Hispanic or Latino	Native Hawaiian or Other Pacific Islander	American Indian or Alaska Native	White	Black or African American	Asian	Hispanic or Latino	Native Hawaiian or Other Pacific Islander	American Indian or Alaskan Native	
A	B	C	D	E	F	G	H	I	J	K	L		
Exec/Sr. Level Officials													
Supervisors													
Professionals													
Technicians													
Sales													
Admin. Support													
Craftspeople													
Operatives													
Service Workers													
Laborers/Helper													
Apprentices													
Other													
TOTAL													
PREVIOUS YEAR TOTAL													

**ATTACHMENT C
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 employers providing services to the City or recipients of grants for financial assistance (in amounts greater than \$10,000 in a twelve-month period of time) pay their employees who are working on the City project or grant, a minimum level of compensation known as the **Living Wage**. This wage must be paid to the employees for the length of the contract/project.

Companies employing fewer than 5 persons and non-profits employing fewer than 10 persons are exempt from the Ordinance. If this exemption applies to your firm, please check below:

- _____ This **company** is exempt due to the fact that we employ or contract with fewer than 5 individuals.
- _____ This **non-profit agency** is exempt due to the fact that we employ or contract with fewer than 10 employees.

The Ordinance requires that all contractors/bidders and/or grantees agree to the following terms:

- a) To pay each of its employees performing work on any covered contract or grant with the City, no less than the living wage, which is defined as \$12.52/hour when health care is provided, or no less than \$13.96/hour for those employers that do *not* provide health care. It is understood that the Living Wage will be adjusted each year on April 30, and covered employers will be required to pay the adjusted amount thereafter. The rates stated above include any adjustment for 2013.
- b) Please check the boxes below which apply to your workforce:
- Employees who are assigned to *any covered* City project or grant will be paid at or above the applicable living wage without health benefits Yes _____ No _____
- OR**
- Employees who are assigned to *any covered* City project or grant will be paid at or above the applicable living wage with health benefits Yes _____ No _____
- c) To post a notice approved by the City regarding the Living Wage Ordinance in every work place or other location in which employees or other persons contracting for employment are working.
- d) To provide the City payroll records or other documentation as requested; and,
- e) To permit access to work sites to City representatives for the purposes of monitoring compliance, investigating complaints or non-compliance.

The undersigned authorized representative hereby obligates the contractor/bidder or grantee to the above stated conditions under penalty of perjury and violation of the Ordinance.

Company Name	Address, City, State, Zip
Signature of Authorized Representative	Phone (area code)
Type or Print Name and Title	Email address
Date signed	

Questions about this form? Please contact:
Procurement Office City of Ann Arbor
Phone: 734/794-6500

**CITY OF ANN ARBOR
LIVING WAGE ORDINANCE**

RATE EFFECTIVE APRIL 30, 2013 - ENDING APRIL 29, 2014

\$12.52 per hour

If the employer provides health care benefits*

\$13.96 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
Karen Lancaster at 734/794-6500 or Klancaster@a2gov.org**

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 Advertisement, Human Rights Division Contract Compliance Forms, 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 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 _____, 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 1:319 (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 further agrees that the cited provisions of Chapter 14 and Chapter 23 form a part of this Contract.

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 _____ DAY OF _____, 20__.

Bidder's Name

Authorized Signature of Bidder

Official Address

(Print Name of Signer Above)

Telephone Number

Email Address for Award Notice

LEGAL STATUS OF RESPONDENT

(The Respondent shall fill out the appropriate form and strike out the other two.)

By signing below the authorized representative of the Respondent hereby certifies that:

The Respondent is:

- A corporation organized and doing business under the laws of the state of _____, for whom _____ bearing the office title of _____, whose signature is affixed to this proposal, is authorized to execute contracts on behalf of respondent.*

*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 with the county of _____, whose members are (attach list including street and mailing address for each.)
- An individual, whose signature with address, is affixed to this RFP.

Respondent has examined the basic requirements of this RFP and its scope of services, including all Addendum (if applicable) and hereby agrees to offer the services as specified in the RFP.

Signature Date: _____,

(Print) Name _____ Title _____

Firm: _____

Address: _____

Contact Phone _____ Fax _____

Email _____

BID FORM

Section 1 – Schedule of Prices

Project: Barton Dam – Right Embankment Drainage Blanket Installation
ITB No.: 4292
File No. 13003

Bidder's Name: _____

Notes:

1. All bidders shall provide a Unit Price and Total Price for all bid items specified.
2. Quantities included in the bid table represent estimated quantities for different work. The CONTRACTOR shall be compensated for the actual number of items completed using the unit prices provided.
3. The City, at its sole discretion, may elect to delete any portion of the work delineated below, with no change to the unit prices provided. Work shall be determined based upon the availability of funds.
4. Any item not provided in the following list shall be considered incidental.
5. Contract shall be awarded based on the base bid or any combination of the base bid and alternate bid areas in any manner the City believes to be in its best interest.

Bid Items

The Bidder agrees to complete the Project and all related work, as specified and shown on the drawings, for the following unit prices.

BARTON DAM – RIGHT EMBANKMENT DRAINAGE BLANKET INSTALLATION – BASE BID					
Item No.	Item Description	Qty	Unit	Unit Price	Total Price
1.	General Conditions, Insurance, Bonds, Mobilization	1	LS	\$	\$
2.	Soil Erosion Control	1	LS	\$	\$
3.	Tree Removal (over 12")	4	EA	\$	\$
4.	Tree Removal (4" – 12")	11	EA	\$	\$
5.	Clearing and Grubbing	1800	SY	\$	\$
6.	Earthwork	1	LS	\$	\$
7.	Additional Earthwork (Allowance)	60	CY	\$	\$
8.	Drainage Blanket Geotextile	1100	SY	\$	\$
9.	Drainage Blanket Aggregate (12")	1100	SY	\$	\$

10.	Seed and Mulch Disposal Area	1000	SY	\$	\$
11.	Demobilization and Final Restoration	1	LS	\$	\$
TOTAL BASE BID (ITEMS 1 THROUGH 11)					\$

_____ Dollars (\$_____)

(Amount shall be shown in both words and figures. In case of a discrepancy, the amount shown in words shall govern.)

BID FORM

Section 2 - Material and Equipment 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.

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

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-1, 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 _____

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.

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>
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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 _____

BID FORM

Section 5 – References

GENERAL CONTRACTOR (Name: _____)

Include a minimum of three references from similar projects completed within the past five (5) years involving high ground water, control of ground and surface water in conjunction with earth work.

Refer also to Instructions to Bidders for additional requirements.

1) _____
Project Name Cost Date Constructed

_____ Phone Number
Contact Name

2) _____
Project Name Cost Date Constructed

_____ Phone Number
Contact Name

3) _____
Project Name Cost Date Constructed

_____ Phone Number
Contact Name

BID FORM

Section 6 – References

SUBCONTRACTOR (Name: _____)

Include a minimum of three references from similar projects completed within the past five (5) years.

Refer also to Instructions to Bidders for additional requirements.

1) _____
Project Name Cost Date Constructed

Contact Name Phone Number

Description

2) _____
Project Name Cost Date Constructed

Contact Name Phone Number

Description

3) _____
Project Name Cost Date Constructed

Contact Name Phone Number

Description

CONTRACT

THIS AGREEMENT is made on the _____ day of _____, 20__, between the CITY OF ANN ARBOR, a Michigan Municipal Corporation, 301 East Huron Street, Ann Arbor, Michigan 48104 (“City”) and _____ (“Contractor”)

(An individual/partnership/corporation, include state of incorporation)

(Address)

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 “Barton Dam – Right Embankment Drainage Blanket Installation” in accordance with the requirements and provisions of the following documents, including all written modifications incorporated into any of the documents, which are incorporated as part of this Contract:

Human Rights Division Contract	General Conditions
Living Wage Declaration of Compliance Forms (if applicable)	Standard Specifications
Bid Forms	Detailed Specifications
Contract and Exhibits	Plans
Bonds	Addenda

ARTICLE II - Definitions

Administering Service Area/Unit means Public Services Area.

Supervising Professional or Owner means Senior Utilities Engineer or other persons acting under the authorization of the Administrator/Manager of the Administering Service Area/Unit.

Engineer or Owner’s Representative means Consulting Professional acting under the authorization of the Supervising Professional/Owner.

Project means, Barton Dam – Right Embankment Drainage Blanket Installation, Bid No. ITB-4292

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 two (2) consecutive months. Shorter completion times for certain portions of the work may be specified in the Detailed Specifications. Liquidated damages shall also apply to these intermediate milestones based on the amounts listed in the Detailed Specifications.
- (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 and not as a penalty, an amount equal to \$500.00 for each calendar day of delay in the completion of all the work. 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.

As an independent requirement, where the Detailed Specifications or Plans identify certain portions of the work to be completed within a shorter period of time and the Contractor fails to complete each portion within the shorter period specified for each portion, including any extension granted in writing by the Project Supervisor, the City is entitled to deduct from the monies due the Contractor, as liquidated damages and not as a penalty, the amount equal to that identified in Specification Section 01140, Table 1 for each portion or Phase of the work not timely completed for each calendar day of delay in completion of each portion of the work.

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.

Liquidated damages under this section are in addition to any liquidated damages due under Section 5 of the General Conditions.

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 Forms for the estimated bid total of:

_____ Dollars (\$ _____)

- (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 without the written consent of 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 agreement, 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 agreement.

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.

ARTICLE IX - Indemnification

To the fullest extent permitted by law, Contractor shall indemnify, defend and hold harmless 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.

ARTICLE X - Entire Agreement

This Contract represents the entire understanding between the City and the Contractor and it supersedes all prior representations or agreements whether written or oral. Neither party has relied on any prior representations in entering into this Contract. This Contract may be altered, amended or modified only by written amendment signed by the City and the Contractor.

FOR CONTRACTOR

By _____
Its: _____

FOR THE CITY OF ANN ARBOR

By _____
John Hieftje, Mayor

By _____
Jacqueline Beaudry, City Clerk

Approved as to substance

By _____
Steven D. Powers, 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 dated _____, 20__, for: _____ 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.

SIGNED AND SEALED this _____ day of _____, 20__.

(Name of Surety Company)

By _____
(Signature)

Its _____
(Title of Office)

(Name of Principal)

By _____
(Signature)

Its _____
(Title of Office)

Approved as to form:

Name and address of agent:

Stephen K. Postema, City Attorney

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, dated _____, 20__, for _____
_____; 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.

SIGNED AND SEALED this _____ day of _____, 20__.

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

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

Approved as to form:

Name and address of agent:

Stephen K. Postema, City Attorney

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."

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.

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 1:319 of Chapter 14 of Title I of the Code of the City of Ann Arbor, the Contractor agrees to conform to Chapter 23 of Title I of the Code of the City of Ann Arbor, as amended, which in part states:

1:814. Applicability.

- (1) This Chapter shall apply to any person that is a contractor/Bidder or grantee as defined in Section 1:813 that employs or contracts with five (5) or more individuals; provided, however, that this Chapter shall not apply to a non-profit contractor/Bidder or non-profit grantee unless it employs or contracts with ten (10) or more individuals.
- (2) This Chapter shall apply to any grant, contract, or subcontract or other form of financial assistance awarded to or entered into with a contractor/Bidder or grantee after the effective date of this Chapter and to the extension or renewal after the effective date of this Chapter of any grant, contract, or subcontract or other form of financial assistance with a contractor/Bidder or grantee.

1:815. Living Wages Required.

- (1) Every contractor/Bidder or grantee, as defined in Section 1:813, shall pay its covered employees a living wage as established in this Section.
 - (a) For a covered employer that provides employee health care to its employees, the living wage shall be \$12.52 an hour, or the adjusted amount hereafter established under Section 1:815(3).
 - (b) For a covered employer that does not provide health care to its employees, the living wage shall be \$13.96 a hour, or the adjusted amount hereafter established under Section 1:815(3).

- (2) In order to qualify to pay the living wage rate for covered employers providing employee health care under subsection 1:815(1)(a), a covered employer shall furnish proof of said health care coverage and payment therefor to the City Administrator or his/her designee.
- (3) The amount of the living wage established in this Section shall be adjusted upward no later than April 30, 2002, and every year thereafter by a percentage equal to the percentage increase, if any, in the federal poverty guidelines as published by the United States Department of Health and Human Services for the years 2001 and 2002. Subsequent annual adjustments shall be based upon the percentage increase, if any, in the United States Department of Health and Human Services poverty guidelines when comparing the prior calendar year's poverty guidelines to the present calendar year's guidelines. The applicable percentage amount will be converted to an amount in cents by multiplying the existing wage under Section 1.815(1)(b) by said percentage, rounding upward to the next cent, and adding this amount of cents to the existing living wage levels established under Sections 1:815(1)(a) and 1:815(1)(b). Prior to April 1 of each calendar year, the City will notify any covered employer of this adjustment by posting a written notice in a prominent place in City Hall, and, in the case of a covered employer that has provided an address of record to the City, by a written letter to each such covered employer.

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 Section 209 of the Elliot-Larsen Civil Rights Act (MCL 37.2209). The Contractor further agrees to comply with the nondiscrimination provisions of Chapter 112 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. The Contractor further agrees to comply with the provisions of Section 9:161 of Chapter 112 of the Ann Arbor City Code and in particular the following excerpts:

9:161 NONDISCRIMINATION BY CITY CONTRACTORS

- (1) All Contractors proposing to do business with the City of Ann Arbor shall satisfy the nondiscrimination administrative policy adopted by the City Administrator in accordance with the guidelines of this section. All Contractors shall receive approval from the Director prior to entering into a contract with the City, unless specifically exempted by administrative policy. All City Contractors shall take affirmative action to insure 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 race, national origin or sex.
- (2) Each prospective contractor shall submit to the City data showing current total employment by occupational category, sex and minority group. If, after verifying this data, the Director concludes that it indicates total minority and female employment commensurate with their availability within the contractor's labor recruitment area, i.e., the area from which the contractor can reasonably be expected to recruit, said contractor shall be accepted by the Director as having fulfilled affirmative action requirements for a period of one year at which

time the Director shall conduct another review. Other Contractors shall develop an affirmative action program in conjunction with the Director. Said program shall include specific goals and timetables for the hiring and promotion of minorities and females. Said goals shall reflect the availability of minorities and females within the Contractor's labor recruitment area. In the case of construction Contractors, the Director shall use for employment verification the labor recruitment area of the Ann Arbor-Ypsilanti standard metropolitan statistical area. Construction Contractors determined to be in compliance shall be accepted by the Director as having fulfilled affirmative action requirements for a period of six (6) months at which time the Director shall conduct another review.

- (3) In hiring for construction projects, contractors shall make good faith efforts to employ local persons, so as to enhance the local economy.
- (4) All Contracts shall include provisions through which the Contractor agrees, in addition to any other applicable Federal or State labor laws:
 - (a) To set goals, in conference with the Human Resources Director, for each job category or division of the work force used in the completion of the City work;
 - (b) To provide periodic reports concerning the progress the Contractor has made in meeting the affirmative action goals it has agreed to;
 - (c) To permit the Director access to all books, records and accounts pertaining to its employment practices for the purpose of determining compliance with the affirmative action requirements.
- (5) The Director shall monitor the compliance of each contractor with the nondiscrimination provisions of each contract. The Director shall develop procedures and regulations consistent with the administrative policy adopted by the City Administrator for notice and enforcement of non-compliance. Such procedures and regulations shall include a provision for the posting of Contractors not in compliance.
- (6) All City Contracts shall provide further that breach of the obligation not to discriminate shall be a material breach of the Contract for which the City shall be entitled, at its option, to do any or all of the following:
 - (a) To cancel, terminate, or suspend the Contract in whole or part and/or refuse to make any required periodic payments under the Contract;
 - (b) Declare the Contractor ineligible for the award of any future contracts with the City for a specified length of time;
 - (c) To recover liquidated damages of a specified sum, said sum to be that percentage of the labor expenditure for the time period involved which would have accrued to minority group members had the affirmative action not been breached;

(d) Impose for each day of non-compliance, liquidated damages of a specified sum, based upon the following schedule:

<u>Contract Amount</u>	<u>Assessed Damages Per Day of Non-Compliance</u>
\$ 10,000 - 24,999	\$ 25.00
25,000 - 99,999	50.00
100,000 - 199,999	100.00
200,000 - 499,999	150.00
500,000 - 1,499,999	200.00
1,500,000 - 2,999,999	250.00
3,000,000 - 4,999,999	300.00
5,000,000 - and above	500.00

(e) In addition the Contractor shall be liable for any costs or expenses incurred by the City of Ann Arbor in obtaining from other sources the work and services to be rendered or performed or the goods or properties to be furnished or delivered to the City under this contract.

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

- A. 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 which may arise under this Contract; whether the acts were made by the Contractor or by any subcontractor or anyone employed by them directly or indirectly. The following insurance policies are required:
 1. 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
 2. Commercial General Liability Insurance equivalent to, as a minimum, Insurance Services Office form CG 00 01 07 98. The City of Ann Arbor shall be named as an additional insured. There shall be no added exclusions or limiting endorsements including, but not limited to: Products and Completed Operations, Explosion, Collapse and Underground coverage or Pollution. Further, 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 Job General Aggregate

\$1,000,000 Personal and Advertising Injury

\$2,000,000 Products and Completed Operations Aggregate

3. Motor Vehicle Liability Insurance, including Michigan No-Fault Coverages, equivalent to, as a minimum, Insurance Services Office form CA 00 01 07 97. The City of Ann Arbor shall be named as an additional insured. There shall be no added exclusions or limiting endorsements. Coverage shall include all owned vehicles, all non-owned vehicles and all hired vehicles. 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.
 4. 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.
- B. Insurance required under Section A.2 and A.3 of this Contract 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.
- C. In the case of all Contracts involving on-site work, the Contractor shall provide to the City before the commencement of any work under this Contract documentation demonstrating it has obtained the above mentioned policies. Documentation must provide and demonstrate an unconditional 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; name of insurance company; name and address of the agent or authorized representative; name and address of insured; project name; policy expiration date; and specific coverage amounts; (b) any deductibles or self-insured retentions which shall be approved by the City, in its sole discretion; (c) that the policy conforms to the requirements specified. An original certificate of insurance may be provided as an initial indication of the required insurance, provided that no later than 21 calendar days after commencement of any work the Contractor supplies a copy of the endorsements required on the policies. Upon request, the Contractor shall provide within 30 days a copy of the policy(ies) 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 to the Administering Service Area/Unit at least ten days prior to the expiration date.
- D. Any Insurance provider of Contractor shall be admitted and 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-admitted insurance companies are not acceptable unless approved in writing by the City.

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 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.

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 Barton Dam – Right Embankment Drainage Blanket Installation, 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 Advertisement. 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.

A copy of the Public Services Department Standard Specifications may be purchased from the Engineering Division, (Fourth Floor, City Hall, Ann Arbor, Michigan), for \$35.00 per copy. In addition, a copy of these Standard Specifications is available for public viewing at the Engineering Division office, for review Monday through Friday between the hours of 8:30 a.m. and 4:00 p.m. Copies of the Standard Specifications can also be downloaded from the web link:

http://www.a2gov.org/government/publicservices/project_management/privatedev/pages/standardspecificationsbook.aspx.

DETAILED SPECIFICATIONS

SECTION 01000

GENERAL REQUIREMENTS

PART 1 - GENERAL

1.1 DESCRIPTION OF WORK

- A. Work under this Contract consists of repair to seepage at the Barton Dam and shall include but not be limited to the following: clearing and grubbing of work area, excavation and grading, installation of a drainage blanket, surface restoration and cleanup and all related work.
- B. It is the intent of these Contract Documents that the Contractor provide a complete and finished product. Items shown on the Drawings and Specifications not specifically connected to a heading in the Bid Form are to be considered as incidental to the work.

1.2 EXISTING FACILITIES ACCESS

- A. The Contractor shall be responsible for maintaining safe access for the public to the existing park areas beyond the work zones. The Contractor shall install path barricades and signage to limit public access to the work zone during working hours. The signs and barricades shall be removed during non-working hours.
- B. Access to the parks shall not be temporarily disrupted without coordination with and prior approval of the Owner.
- C. Prior to commencing work, the Contractor shall submit to the Owner a plan for bringing construction traffic to and from the site.

1.3 CONSTRUCTION WATER

- A. Water for construction is not available from the Owner and may not be obtained from the existing facilities. The Contractor shall be responsible for providing all construction water required for the project.

1.4 CONSTRUCTION POWER

- A. Power for construction is not available at the site. The Contractor shall be responsible for temporary construction power.

1.5 NOTIFICATION OF UTILITIES

- A. The Contractor shall notify all utilities prior to any excavation.
- B. MISS DIG – Utility providers are members of a utility communication system called "MISS DIG" that provides service to participating utilities. The Contractors shall contact "MISS DIG" not less than 72 hours before starting construction for assistance in locating utilities or for any work to be done on utilities. The toll free phone number is (800) 482-7171.

1.6 WORK SCHEDULE

- A. The Contractor shall provide a work schedule. The schedule shall be complete and shall show in detail the manner in which he proposes to complete the work under this Contract and approximate monthly billing of the Contract. The purpose of the schedule is to assist the

BARTON DAM – RIGHT EMBANKMENT DRAINAGE BLANKET INSTALLATION

Owner in notifying the public of inconveniences and to anticipate cash-flow on the job, and to determine if the Contractor is reasonably proceeding with the work to assure completion within the specified time.

- B. Work hours shall be restricted to Monday through Friday, 7AM to 7PM. Work shall not be conducted on City holidays. Exceptions to work hour limits shall be only by written permission of the Owner.

1.7 CONSTRUCTION SEQUENCE

- A. The Contractor shall coordinate and schedule his work with the Owner when his operation may affect access to existing facilities or interfere with dam operations.
- B. Prior to commencing the work, the Contractor shall provide the Engineer a detailed schedule of the proposed work. The schedule shall include a list of tasks required to complete the work; their relevancy to each other; expected duration; and completion dates.

1.8 CONSTRUCTION PERMITS

- A. The Contractor will be required to follow the requirements established by all permits necessary for the construction of this project. The following is a list of permits that must be obtained prior to the beginning of construction.
 - 1. Soil Erosion and Sedimentation Control Permit, as part of Public Act 451 (1994), Part 91.
 - 2. MDEQ Water Resources Division Permit (obtained by the Owner).
- B. The Soil Erosion and Sedimentation Control permit shall be issued by the City of Ann Arbor. The Contractor will be required to apply for, pay all fees, obtain and adhere to all requirements of the permit. The Contractor shall have an SESC-certified inspector assigned to the project to complete all required inspections and reports. An electronic copy of all inspections shall be provided to the Owner.
- C. The Michigan Department of Environmental Quality (MDEQ) Water Resources Division Permit has been obtained by the Owner through the MDEQ. A copy of this permit is provided in Appendix B of these specifications.

1.9 DUST AND MUD CONTROL

- A. All haul roads, and other public and private roads, driveways and parking lots used by the Contractor must be maintained in a dust free condition during the life of this Contract. The control of the dust shall be accomplished by the application of dust control materials and methods of application as approved and as directed by the Engineer. Such dust control materials shall be applied as often as is necessary to control the dust.
- B. Cost of providing dust control shall be included as part of general conditions.
- C. Should the Contractor be negligent in providing dust control, the Owner may, with or without notice, cause the same to be done and deduct the cost of such work from any monies due or to become due the Contractor under this Contract, but the performance of such work by the Owner, or by the Owner's direction, shall service in no way to release the Contractor from liability for dust control.

1.10 DIGITAL PHOTOGRAPHIC RECORD

- A. The Contractor shall furnish to the Owner a digital photographic record for all areas proposed for improvement and all access ways to the work area. Areas to be photographed consist of the land area depicted by the General Site Plan of the project and shall include: Barton Dam work zone including access route and temporary staging area. In general, the Contractor shall include parking lots, access paths for construction traffic, storage and staging areas and other areas that may be impacted by his activities.
- B. The photographs shall be stored on a CD or DVD of such quality to accurately show the existing conditions. The record shall be produced one (1) week prior to the placement of materials or equipment in the construction area.
- C. The record shall include overview photos of each entire area; and detailed photos of key features, including railings, decking, pavements, structures, utilities, equipment, etc. The photographs shall be ordered in sequential sets as follows: photograph of a sign board identifying each separate area; overview photo or photos of that area; and detailed views relevant only to that particular area. The overview photographs should enable to viewer to identify both the area in question and the particular items that are shown in detail in the photographs immediately following.
- D. The photographs must be recorded while the visibility is clear and at no time will it be allowed during periods of ground cover.
- E. The photographic record shall include date, time, and location at appropriate intervals. The location shall be easily referenced to the Contract Drawings.

1.11 PROJECT PROGRESS MEETING

- A. It shall be the responsibility of the Contractor to have a representative, including key subcontractors, present at each meeting. The Contractor shall be available for meetings shall be held at least twice a month as necessary.

1.12 METHOD OF MEASUREMENT AND BASIS OF PAYMENT

A. GENERAL

The method of measurement and the basis of payment for each item in the Proposal will be as specified in the schedule attached. The items are generally grouped by the section of the Specifications under which the particular unit of work is detailed. There will be no payment allowed for any unit of work not specifically mentioned in the Proposal as a bid item, and any such unit of work not mentioned in the Proposal, but necessary for the completion of the Project, will be considered as incidental to the construction of the Project.

B. MEASUREMENT

Quantities of work completed under the Contract will be measured by the Engineer according to the United States standard measures. When tons are specified, the unit shall be the ton of 2000 pounds. When measurements are stated in miles, stations, acres, they will be horizontal measurements unless specified otherwise. Where measurements are specified to be "in place," they will be taken along the actual surface of the completed item to obtain lineal, area, or volume measurements.

C. PAYMENT

In each and every instance in the following Measurement and Payment Schedule, where a Basis of Payment is specified, it shall be understood to be prefaced by the following statement, "**The contract unit price bid in the Proposal will be payment in full for all labor, materials, and equipment necessary to do the following according to the Plans and Specifications.**" Payment shall be made on the basis of the actual quantity of the item completed and accepted at the unit price for such item named in the Proposal.

BID ITEMS – BASE BID

<u>ITEM IN PROPOSAL</u>	<u>METHOD OF MEASUREMENT</u>	<u>BASIS OF PAYMENT</u>
General Conditions, Insurance, Bonds Mobilization	By the unit lump sum (LS)	The complete cost of insurance, bonds, permits and mobilization for the project and other requirements of General Conditions. Includes offices, stores, conveniences, and other temporary facilities, site preparation, and whatever means the Contractor deems necessary for accessing the work, organizing the project, coordination with Owner, Engineer, third parties and sub-contractors, obtaining all permits, permit inspection fees, permit requirements, Shop Drawings, paperwork, bringing equipment to the site as required, management of job, and all related work. Any costs assumed to be above and beyond the value of this pay item shall be incidental to other pay items in the Contract. The maximum amount of this item shall be 8% of the total for the project.
Soil Erosion Control	By the unit lump sum (LS).	For complete furnishing, installation, maintenance and removal of all soil erosion control measures required to meet the conditions set forth in these specifications as well as the SESC permit.
Tree Removal (over 12")	By the unit each (EA).	For complete removal of the tree including cutting into appropriate length for chipping (10' long or less), transport to the designated temporary storage area and stockpiled.
Clearing and Grubbing	By the unit square yard (SY).	For complete removal and disposal of all brush and vegetation including trees up to 4" in diameter from the work zone. Stumps and root matter are also included. Brush, small trees, stumps and roots are to be transported to the designated temporary storage area and neatly stockpiled. Measurement based on surface area disturbed within the grading limits shown on the plans.

<u>ITEM IN PROPOSAL</u>	<u>METHOD OF MEASUREMENT</u>	<u>BASIS OF PAYMENT</u>
Earthwork	By the unit lump sum (LS).	For dewatering and excavation of subgrade in the work area designated to receive the drainage blanket installation (6-inch depth assumed). Disposal of the excavated material in the adjacent disposal area including finish grading ready to receive seed and mulch.
Additional Earthwork (Allowance)	By the unit cubic yard (CY).	For additional subgrade excavation (greater than 6-inch depth) if required and pre-approved by the Owner. Includes excavation, disposal
Drainage Blanket Geotextile	By the unit square yard (SY).	For complete furnishing and installation of the geotextile filter. Area measurement shall be from the outside limits of the installed filter.
Drainage Blanket Aggregate (12")	By the unit square yard (SY).	For furnishing, placing and grading aggregate over the geotextile filter as shown on the plans. Area measurement shall be from outside limits of the installed aggregate.
Seed and Mulch Disposal Area	By the unit square yard (SY).	For complete seeding and mulching of the spoil disposal area within the work zone including furnishing of materials, installation and maintenance as necessary to provide a thorough, consistent vegetative surface cover.
Demobilization and Final Restoration	By the unit lump sum (LS)	Removal of equipment from the site, restoration, and return of all Owner facilities including temporary access routes and disposal areas to full use. Establishment of restoration.

END OF SECTION

SECTION 01330

SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Submittal Procedures
- B. Certifications
- C. Shop Drawings
- D. Product Data
- E. Samples
- F. Manufacturers' Instructions
- G. Manufacturers' Field Reports
- H. Construction Schedule
- I. Submittal Schedule

1.2 SUBMITTAL PROCEDURES

- A. Package each submittal appropriately for shipping and handling. This shall include an index either on the transmittal or within the submittal itself. Transmit each submittal from Contractor to Engineer using a transmittal form. Submittals received from sources other than Contractor will be returned without action. Use separate transmittals for items from different specification sections. Number each submittal consecutively. Resubmittals should have the same number as the original, plus a letter designation for each Resubmittal (i.e. 7-A, 7-B, etc.)
- B. Indicate on the transmittal relevant information and requests for data. On the form, or separate sheet, record deviations from Contract Document requirements, including minor variations and limitations. Include Contractor's certification that information complies with Contract Document requirements. On Resubmittal, all changes shall be clearly identified for ease of review. Resubmittals shall be reviewed for the clearly identified changes only. Any changes not clearly identified will not be reviewed and original submittal shall govern.
- C. Include the following information on the label for processing and recording action taken.
 - 1. Project name.
 - 2. Date.
 - 3. Name and address of Engineer.
 - 4. Name and address of Contractor.
 - 5. Name and address of subcontractor.

6. Name and address of supplier.
 7. Name of manufacturer.
 8. Number and title of appropriate specification sections.
 9. Drawing number and detail references, as appropriate.
- D. Schedule submittals to expedite the Project, and deliver to Engineer at business address. Coordinate submission of related items. Coordinate related activities that require sequential activity.
 - E. Submit a schedule of shop drawing submittals.
 - F. Review and approve shop drawings, project data, and samples before submitting them.
 - G. Verify field measurements, field construction criteria, catalog numbers, and similar data. Indicate on the submission exactly what was verified.
 - H. Any markings done by Contractor shall be done in a color other than red. Red is reserved for Engineer's marking.
 - I. The number of copies to be submitted will be determined at the pre-construction conference. Reproducible may be submitted and will be marked and returned to Contractor. Blue or black line prints shall be submitted in sufficient quantity for distribution to Engineer and Owner recipients.
 - J. Coordinate each submittal with the requirements of the Contract Documents.
 - K. Provide space for Contractor and Engineer review stamps.
 - L. Apply Contractor's stamp, signed or initialed certifying that review, approval, verification of products required, field dimensions, adjacent construction Work, and coordination of information, is in accordance with the requirements of the Work and Contract Documents.
 - M. Submit the number of copies that the Contractor requires, plus four copies that will be retained by the Owner and Engineer.
 - N. Identify variations from Contract Documents and Product or system limitations that may be detrimental to successful performance of the completed Work.
 - O. No claim will be allowed for damages or extension of time because of delays in the work resulting from rejection of material or from revision and resubmittal of shop drawings, project data, or samples.
 - P. No extension of contract time will be authorized because of failure to transmit submittals to Engineer sufficiently in advance of the work to permit processing.
 - Q. Engineer reserves the right to withhold action on a submittal required coordination with other submittals until related submittals are received.
 - R. Do not install materials or equipment which requires submittals until the submittals are returned with Engineer's/Owner's stamp and initials or signature indicating approval. The Owner shall have final approval authority.

- S. Contractor's responsibility of errors, omissions, and deviations from requirements of Contract Documents in submittals is not relieved by the Engineer's review.
- T. Distribute copies of reviewed submittals to concerned parties. Instruct parties to promptly report any inability to comply with requirements.
- U. Do not use Shop Drawings without an appropriate final stamp indicating action taken in connection with construction.
- V. Submittals not requested in conformance with this Specification will not be recognized or processed.
- W. Revise and resubmit as required, identify all changes made since the previous submittal.
- X. In the event that more than two re-submittals of any submittal is necessary to achieve conformance to the contract requirements, Contractor shall be charged for excess engineering. The Owner shall deduct these charges from the Contractor's final payment. Charges will be \$115.00/hr. minimum 4 hours, for each additional submittal of an item. A tabulated record of such charges will be provided for the Contractor's review prior to the processing of the final payment.
- Y. Submit new project data and samples when the initial submittal is returned disapproved.

1.3 CERTIFICATIONS

- A. When specified in individual specification sections, submit certification by the manufacturer, installation/application subcontractor, or the Contractor to Engineer, in quantities specified for Product Data.
- B. Indicate that the material or Product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.
- C. Certifications may be recent or previous test results of the material or product, but must be acceptable to Engineer.

1.4 SHOP DRAWINGS

- A. Shop Drawings: Submit to Engineer for review for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. Produce copies and distribute in accordance with Paragraph 1.2 - Submittal Procedures.
- B. Submit newly prepared information, drawn to accurate scale. Highlight, encircle, or otherwise indicate deviations from the Contract Documents. Do not reproduce Contract Documents or copy standard information as the basis of shop drawings. Standard information prepared without specific reference to the project is not considered shop drawings.
- C. Shop drawings include fabrication and installation drawings, setting diagrams, schedules, patterns, templates, and similar drawings. Include the following information:
 - 1. Dimension.
 - 2. Identification of products and materials included.

3. Compliance with specified standards.
 4. Notation of coordination requirements.
 5. Notation of dimensions established by field measurements.
- D. Standard manufactured items in the form of catalog work sheets showing illustrated cuts of the items to be furnished, scale details, sizes, dimensions, quantity, and all other pertinent information should be submitted and approved in a similar manner.
- E. Measurements given on shop drawings or standard catalog sheets, as established from contract drawings and as approved by Engineer, shall be followed. When it is necessary to verify field measurements, they shall be checked and established by Contractor. The field measurements so established shall be followed by Contractor and by all affected trades.
- F. Indicate special utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.

1.5 PRODUCT DATA

- A. Product Data: Submit to Engineer for review for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. Produce copies and distribute in accordance with Paragraph 1.2 - Submittal Procedures.
- B. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information specific to this Project.
- C. Indicate product utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.

1.6 MANUFACTURER'S INSTRUCTIONS

- A. When specified in individual specification sections, submit printed instructions for delivery, storage, assembly, installation, start-up, adjusting, and finishing, to Engineer for delivery to Owner in quantities specified for Product Data.
- B. Indicate special procedures, perimeter conditions requiring special attention, and special environmental criteria required for application or installation.

1.7 MANUFACTURER'S FIELD REPORTS

- A. Submit reports for the Owner.
- B. Submit report in duplicate, within 7 days of observation, to Engineer and Owner for Information.
- C. Submit for information for the limited purpose of assessing conformance with information given and the design concept expressed in the Contract Documents.

1.8 CONSTRUCTION SCHEDULE

- A. Bar Chart Schedule:
1. Prepare a fully developed, horizontal bar chart type construction schedule. Schedule shall be prepared electronically in Microsoft Project with critical path and links shown. Submit color copies of the schedule within 30 days of the date established for commencement of the work.
 2. Provide a separate item bar for each significant construction activity. Provide a continuous vertical line to identify the first working day of each week. Use the same breakdown of units of the work as indicated on schedule of values.
 3. Prepare schedule of sheet, or series of sheets, of stable transparency, or other reproducible media, of sufficient width to show data for entire construction period.
 4. Secure time commitments for performing critical elements of the work from parties involved. Coordinate each element on schedule with other construction activities; include minor elements involved in the sequence of the work. Show each activity in proper sequence. Indicate graphically sequences necessary for completion of related portions of the work.
 5. Coordinate construction schedule with schedule of values, list of subcontracts, submittal schedule, progress reports, payment requests, and other schedules.
 6. Indicate completion in advance of the date established for substantial completion. Indicate substantial completion of schedule to allow time for Engineer's procedures necessary for certification of substantial completion
- B. Schedule Updating: Provide an updated construction schedule at each progress meeting. Color copies of the updated schedule shall be prepared for all attendees.

1.9 SUBMITTAL SCHEDULE

- A. After development and acceptance of the construction schedule, prepare a complete schedule of submittals. Submit schedule within 10 days of the date required for establishment of construction schedule.
- B. Coordinate submittal schedule with the list of subcontracts, schedule of values, and the list of products as well as construction schedule.
- C. Prepare schedule in chronological order; include submittals required during the first 90 days. Provide the following information:
1. Scheduled date for the first submittal.
 2. Related section number.
 3. Submittal category.
 4. Name of subcontractor.
 5. Description of the part of the work covered.

6. Scheduled date for Resubmittal.
 7. Scheduled date Engineer's final release or approval.
- D. The submittal schedule shall reflect critical path shop drawings that must be expedited.
 - E. Following response to initial submittal, print and distribute copies to Engineer, Owner, subcontractors, and other parties required to comply with submittal dates indicated. Post copies in the project meeting room and field office.
 - F. When revisions are made, distribute to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the work and are no longer involved in construction activities.
 - G. Schedule Updating: Provide an updated submittal schedule at each progress meeting.

PART 2 - PRODUCTS

NOT USED

PART 3 - EXECUTION

3.1 ENGINEER'S ACTION

- A. Except for submittals for record, information or similar purposes, where action and return is required or requested, Engineer will review each submittal, mark to indicate action taken, and return promptly.
 1. Compliance with specified characteristics is Contractor's responsibility.
- B. Action Stamp: Engineer will stamp each submittal with a uniform, self-explanatory action stamp. The stamp will be appropriately marked, as follows, to indicate the action taken:
 1. Final Unrestricted Release: Where submittals are marked "No Exceptions Taken" that part of the work covered by the submittal may proceed provided it complies with the requirements of the Contract Documents; final acceptance will depend upon the compliance.
 2. Final-But-Restricted Release: When submittals are marked "Make Corrections Noted" that part of the work covered by the submittal may proceed, provided it complies with notation or correction on the submittal and requirements of the Contract Documents; final acceptance will depend on that compliance.
 3. Returned for Resubmittal: When submittal is marked "Rejected" or "Revise and Resubmit" do not proceed with the part of the work covered by the submittal, including purchasing, fabrication, delivery, or other activity. Revise or prepare a new submittal in accordance with the notations; resubmit without delay. Repeat if necessary to obtain a different action mark.
 - a. Do not permit submittals marked "Rejected" or "Revise and Resubmit" to be used at site, or elsewhere where work is in progress.

4. Additional Information Needed: When submittal is marked "Submit Specified Item" Contractor shall submit requested information.
5. Other Action: Where a submittal is primarily for information or record purposes, special processing or other activity, the submittal will be returned, marked "Acknowledge Receipt".
6. The approval of Engineer shall not relieve Contractor of responsibility for errors on drawings or submittals as Engineer's checking is intended to cover compliance with drawings and specifications and not enter into every detail of the shop work.

END OF SECTION

SECTION 01770

CLOSEOUT PROCEDURES

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Substantial Completion
- B. Final Inspection
- C. Request for Final Payment

1.2 SUBSTANTIAL COMPLETION

- A. Substantial completion shall be the date as certified by the Engineer when the construction of the Project, or a specified part thereof, is sufficiently completed, in accordance with the Contract Documents, so that the Project, or specified part, can be fully utilized for the purposes for which it was intended.
- B. Before requesting inspection for Certification of Substantial Completion, complete the following. List exceptions in the request.
 - 1. In the Application for Payment that coincides with, or first follows, the date Substantial Completion is claimed, show 100 percent completion for the portion of the work claimed as substantially complete. Include supporting documents for completion as indicated in these Contract Documents and a statement showing an accounting of changes to the contract price.
 - 2. If 100 percent completion cannot be shown, include a list of incomplete items, the value of incomplete construction, and reasons the work is not complete.
 - 3. Advise Owner of pending insurance changeover requirements.
 - 4. Submit specific warranties, workmanship bonds, maintenance agreements, final certifications, and similar documents.
 - 5. Obtain and submit releases enabling Owner unrestricted use of the work and access to services and utilities; include occupancy permits, operating certificate, and similar releases.
 - 6. Complete final cleanup requirements, including touch-up painting. Touch-up and otherwise repair and restore marred exposed finishes.
 - 7. Provide all required demonstration and training sessions.
- C. Inspection Procedures: On receipt of a request for inspection, Engineer will either proceed with inspection or advise Contractor of unfilled requirements.
 - 1. Engineer will prepare the Certificate of Substantial Completion following inspection, or advise Contractor of construction that must be completed or corrected before the certificate will be issued.

2. Engineer will repeat inspection when requested and assured that the work has been substantially completed.
3. Results of completed inspection will be for the basis of requirements for final acceptance.
4. Date of Substantial Completion will begin the warranty period unless noted otherwise.

1.3 FINAL ACCEPTANCE

- A. Before requesting final inspection for certification of final acceptance and final payment, complete the following. List exceptions in the request.
 1. Submit the final payment request with releases and supporting documentation not previously submitted and accepted. Include certificates of insurance for products and completed operations where required.
 2. Submit an updated final statement, accounting for final additional changes to the contract price.
 3. Submit a copy of Engineer's final inspection list of items to be completed or corrected, stating that each item has been completed or otherwise resolved for acceptance. The list shall be endorsed and dated by the Engineer.
 4. Submit final meter readings for utilities, a measured record of stored fuel, and similar data as of date of Substantial Completion, or when Owner took possession of and responsibility for corresponding elements of the work.
 5. Submit consent of surety to final payment.
 6. Submit a final liquidated damages settlement statement.
 7. Submit evidence of final, continuing insurance coverage complying with insurance requirements.
 8. Submit record drawings, maintenance manuals, damage or settlement survey, property survey, and similar final record information.
 9. Deliver tools, spare parts, extra stock, and similar items.
 10. Make final changeover of permanent locks and transmit keys to Owner. Advise OWNER's personnel of changeover in security provisions.
 11. Complete commissioning and training of Owner's personnel.
 12. Discontinue or change over and remove temporary facilities from the site, along with construction tools, mock-ups, and similar elements.
- B. Re-inspection Procedure: Engineer will inspect the work upon receipt of notice that work, including inspection list items from earlier inspections, has been completed, except items whose completion has been delayed because of circumstances acceptable to the Engineer.

1. Upon completion of re-inspection, Engineer will prepare a certificate of final acceptance, or advise Contractor of work that is incomplete or of obligations that have not been fulfilled but are required for final acceptance. If necessary, re-inspection will be repeated.

1.4 REQUEST FOR FINAL PAYMENT

- A. Submit request for final payment in accordance with the Agreement and General Conditions.
- B. Request for final payment shall include:
 1. Documents required in the General Conditions, as may be modified by the Supplementary Conditions.
 2. Releases or Waivers of Lien Rights:
 - a. When submitting releases or waivers of Lien rights, provide release or waiver by Contractor and each Subcontractor and Supplier that provided Contractor with labor, material, or equipment.
 - b. Provide list of Subcontractors and Suppliers for which release or waiver of Lien is required.
 - c. Each release or waiver of Lien shall be signed by an authorized representative of entity submitting release or waiver to Contractor, and shall include Subcontractor's or Supplier's corporate seal if applicable.
 - d. Release or waiver of Lien may be conditional upon receipt of final payment.
 4. Consent of Surety.
 5. Documentation that all punch list items are complete.
 6. Warranties.
 7. Operation and Maintenance Manuals.
 8. Record Drawings being maintained by the Contractor.

PART 2 - PRODUCTS

NOT USED

PART 3 - EXECUTION

NOT USED

END OF SECTION

SECTION 02010

SITE GENERAL PROVISIONS

PART 1 - GENERAL

1.1 DESCRIPTION

- A. The Contractor shall furnish all labor, materials, tools and equipment necessary to provide access to and perform repairs of the Barton Dam – Right Embankment Drainage Blanket Installation.

1.2 PROTECTION OF TREES

- A. Trees designated for protection shall be surrounded by protective fence placed along the drip line.
- B. All other trees that might be subject to damage by the Contractor's operations shall be fenced off as required. If protective fencing cannot be installed at the drip line, trees shall be protected against damage to the bark by 2-inch thick vertical planking securely wired or tied completely around the tree trunk. Such protection shall not be removed until authorized by the Owner.

1.3 SECURITY

- A. Contractor shall provide written documentation of his safety plan for the work.
- B. All work shall be performed in accordance with MIOSHA.
- C. The site is accessible to the public; therefore additional precautions shall be taken for securing work areas, stores and equipment.
- D. The Owner's security requirements shall be met at both locations.
- E. Existing access gates and chains shall remain locked at all times. The Contractor shall daisy chain all closures so that the Owner can access as required.
- F. All security precautions and measures shall be the responsibility of the Contractor.
- G. The Owner in concert with the Contractor shall be responsible for the lock out of the radial gates at both dams. Contractor shall provide a minimum seven days advanced notice to the Owner.
- H. Provide proper signage and barricades at both ends of the Argo pedestrian bridge notifying the public of temporary closures and construction activities. Additional signage shall be provided at Bandemere Park and at the Argo Canoe Livery/Park notifying of the closure. The bridge shall be closed only as necessary and reopened at the end of each work day.
- I. Provide safety fencing around material or equipment storage.

1.4 CONSTRUCTION ACCESS

- A. There is limited access for construction equipment and materials at the site.

- B. The proposed access route to the work area is shown on the project plans. Note that size limitations exist throughout the access route in particular beneath the railroad bridge. The Contractor shall familiarize himself with the access route and its limitations prior to bidding.
- C. The Contractor shall coordinate ongoing pedestrian access to the pedestrian footpaths and canoe portage throughout construction. In general, the footpaths within the work zone may be closed to pedestrian traffic during work hours. The canoe portage must remain open at all times and the Contractor shall coordinate his activities to allow safe portage of canoes.
- D. Upon completion of work, the Contractor shall restore the access route to its original condition.

1.5 WORK AREA AND STORAGE OF MATERIALS

- A. A temporary staging area within the adjacent City owned pump station yard is shown on the plans. The staging area shall be restored to existing conditions upon completion of the Contractor's work.
- B. The working area shall be organized in an orderly manner with storage and tool sheds, sanitary facilities, parking areas for employees, and all other necessary facilities developed and maintained by the Contractor. The Contractor shall keep the work site and all access routes clean and dust free.
- C. Contractor shall not allow any trash, concrete or other construction debris to enter the river. Any materials that fall into the river shall be retrieved and removed by the Contractor.
- D. All materials, supplies and equipment, whether furnished by the Contractor or by the Owner, shall be delivered, stored and handled as to prevent the inclusion of foreign materials and/or damage by water, freezing, breakage or other causes. Packaged materials shall be delivered in the original unopened containers and shall be stored until ready for use. All materials which have been stored shall meet the requirements of the Specifications at the time they are used in the project.

1.6 NOTIFICATION TO UTILITIES

- A. Prior to the start of any operations in the vicinity of any utilities, the Contractor shall notify the utility companies and request that they stake out the locations of the utilities in question.

1.7 EXISTING PUBLIC UTILITIES

- A. The Contractor shall conduct his operations so as not to damage any existing utility. The Contractor shall correct, at his own expense, any injury caused during the operations of his subcontractors or suppliers.

1.8 SANITARY REQUIREMENTS

- A. The Contractor shall provide adequate sanitary facilities for all persons employed on the project. The sanitary facilities shall conform in every way to the requirements of the "General Safety Rules and Regulations for the Construction Industry".
- B. The sanitary facility shall be securely fixed to the ground to prevent vandalism.
- C. The sanitary facility shall be locked by the Contractor during non-working hours.

1.9 WINTER CONSTRUCTION

- A. The Engineer shall have permissive authority over the work which is proposed to be done during the winter months. The Contractor shall provide adequate weather protection, temporary heating and take any other measures which are necessary to insure that the work performed during the winter months is properly installed and protected against damage from freezing.

PART 2 - PRODUCTS

Not Applicable

PART 3 - EXECUTION

3.1 CONTROL OF WATER POLLUTION AND SILTATION

- A. General Requirements
 - 1. The Contractor shall conduct his work in a manner to comply with the Soil Erosion and Sedimentation Control Act of 1972, (MICH P.A. 347) that will not cause damaging siltation or pollution of the water in streams, rivers, lakes and reservoirs. All work of water pollution and siltation control is subject to inspection by the Michigan Department of Environmental Quality (MDEQ).
 - 2. Construction operations shall be conducted in such manner as to reduce erosion to the practicable minimum and prevent damaging siltation to streams, rivers, lakes or reservoirs. The area of erodible land exposed to the elements by operations shall be subject to approval of the Owner and the duration of such exposure prior to final trimming and finishing of the areas shall be as short as practical.
 - 3. The Contractor shall conduct his work in such manner as to prevent the entry of fuels, oils, bituminous materials, chemicals, sewage or other harmful materials into streams, rivers, lakes or reservoirs.

3.2 RESTORATION

- A. All areas disturbed or damaged as a result of construction activities shall be repaired to original conditions or better.
- B. After work has been completed, the entire disturbed area at the site shall be graded to smooth, even surfaces matching the original surface.
- C. All debris and larger stones and sticks and the like shall be removed and disposed of and the entire disturbed area made ready for the addition of top soil and seeding.
- D. After all construction has been completed, the Contractor shall spread 4 inches of approved top soil over all disturbed areas. The Contractor shall secure and deliver to the site whatever amount is required at his own expense.
- E. On slopes greater than 3:1 and all slopes on the embankment, Contractor shall utilize non-woven erosion control mats, fully anchored in place.

- F. The parking lot and gravel access drives shall be maintained free of dirt, silt and construction debris. At the completion of the project, the gravel areas shall be scarified, regraded and stone added as needed. Paved surfaces shall be cleaned weekly or at the Owner's request.

END OF SECTION

SECTION 02240

DEWATERING

PART 1 - GENERAL

1.1 DESCRIPTION

- A. If necessary, the Contractor shall supply all labor, materials, tools and equipment required to lower and control the groundwater levels and hydrostatic pressures to permit all earthwork and construction specified under this contract to be performed in the dry. The control of all ice, snow and surface water shall be considered as part of the work under this Section.
- B. The work under this Section shall include all costs of mobilization, supply, installation, operation, maintenance, supervision, and final dismantling and removal from the site of any and all dewatering equipment.
- C. The Contractor or his dewatering subcontractor shall be currently and appropriately licensed by the State of Michigan to undertake the work covered under this Section and shall submit such information to the Engineer.

1.2 RELATED SECTIONS

- A. Section 02300 – Earthwork.

1.3 SUBMITTALS

- A. In accordance with Section 01330 – Submittal Procedures, the Contractor shall submit complete plans and description of the overall dewatering system he proposes to use for the work under this Section for review by the Engineer, showing the details of the dewatering system prior to initiation of any excavation.
- B. Review by the Engineer of the dewatering system proposed by the Contractor will be only with respect to the basic principles of the methods the Contractor intends to employ. Review by the Engineer of the dewatering system will be based on the demonstrated performance of the system to satisfy the requirements for dewatering as specified herein.

1.4 SITE CONDITIONS

- A. The Contractor shall take all the steps that he considers necessary to familiarize himself with the site conditions, the ground conditions and the groundwater conditions. Copies of the logs of the borings and a soils report are among the data available and a part of these Contract Documents. The data described above is furnished for information only, and it shall be expressly understood that the Owner and/or the Engineer will not be held responsible for any interpretation or conclusions drawn therefrom by the Contractor.

PART 2 - PRODUCTS

NOT USED

PART 3 - EXECUTION

3.1 GENERAL

- A. It is the intent of this Section that an adequate dewatering system shall be installed to lower and control the groundwater in order to permit excavation, grading, and the placement of the fill materials, all to be performed under dry conditions. The dewatering system shall be adequate to pre-drain the water-bearing strata. Appropriate screens and filters shall be used to prevent loss of soil through the dewatering equipment.
- B. Prior to any excavation below the groundwater level, the dewatering system shall be placed into operation to lower the water levels as required and shall be operated continuously 24 hrs. per day, 7 days per week until the work has been satisfactorily constructed including placement of materials and no longer requiring dewatering. An adequate weight of fill material shall be in place to prevent buoyancy or flotation prior to discontinuing operation of the dewatering system.
- C. The Contractor shall obtain written approval from the Engineer before discontinuing the operation of the dewatering system.
- D. The Contractor shall be solely responsible for the arrangement, location and depths of the dewatering system necessary to accomplish the work described under this Section. The dewatering shall be accomplished in a manner that will reduce the hydrostatic head below any excavation to the extent that the water level and piezometric water levels in the construction area are reasonably below prevailing excavation surface, will prevent the loss of fines, seepage, boils, quick conditions or softening of the foundation strata, will maintain stability of the sides and bottom of the excavation and will result in all construction operations being performed in the dry.
- E. The control of all surface and subsurface water, ice and snow is considered as part of the dewatering requirements. The control shall be adequate such that the stability of excavated and constructed slopes are not adversely affected by water, that erosion is controlled, and that flooding of excavations or damage to the existing and/or new structures or portions thereof does not occur. Surface water or roof runoff shall not be directed toward the excavations.
- F. The Contractor shall dispose of all water removed from the excavations in such a manner as will not endanger public health, property, any portion of the work under construction or completed either by him or any other Contractor, shall not recharge the water bearing strata and shall be performed in such a manner as will cause no inconvenience whatsoever to the Owner, Engineer, or to others engaged on work about the site. Water shall be conveyed in conduits or open water channels to avoid erosion.
- G. The Contractor shall provide complete standby equipment, installed and available, for immediate operation as may be required, to adequately maintain dewatering on a continuous basis in the event that all or any part of the dewatering system may become inadequate or fail.
- H. If the dewatering requirements are not satisfied due to inadequacy or failure of the dewatering system, loosening of the foundation strata or instability of the slopes may occur. The supply of all labor and materials of all work necessary to carry out any necessary additional work for the reinstatement of the foundation soils resulting from such inadequacy or failure shall be undertaken by the Contractor subject to the approval of the Engineer and at no additional expense to the Owner.

3.2 REMOVAL OF SYSTEM(S)

- A. After all requirements of this Section are met, the Contractor shall remove all materials and equipment used during this operation. All holes and pits shall be filled immediately with suitable material.

END OF SECTION

SECTION 02300

EARTHWORK

PART 1 - GENERAL

1.1 SUMMARY

- A. The Contractor shall perform all excavation and backfilling necessary to complete the work. This shall include the excavation of earth and rock, the removal and disposal of unsuitable material, dewatering, placement of suitable fill and backfill material, and the restoration and final grading for all earth surfaces.

1.2 REFERENCES

- A. MDOT - Michigan Department of Transportation 2012 Standard Specifications for Construction.
- B. City of Ann Arbor Public Services Department Standard Specifications.

1.3 EXISTING CONDITIONS

- A. Excerpts from a geotechnical investigation performed by CTI and Associates including soil boring logs are appended to these specifications.

1.4 QUALITY ASSURANCE

- A. The Contractor shall provide certifications for all materials including drainage blanket geotextile membrane and aggregate.

PART 2 - PRODUCTS

2.1 DRAINAGE BLANKET

- A. Geotextile shall be woven or non-woven geotextile placed on top of a prepared subgrade and meeting the following specifications.

Table 1 – Woven Geotextile Specifications

Property	Unit	Test Procedure	Specified Value
Apparent Opening Size (AOS)	US Sieve	ASTM D4751	45 (min.)
Permittivity	sec ⁻¹	ASTM D4491	0.05 (min.)
Percent Open Area	%	COE-02215	4 (min.)
Grab Tensile Strength	pounds	ASTM D4632	270 (min.)
Trapezoid Tear Strength	pounds	ASTM D4533	100
Puncture Strength	pounds	ASTM D4833	100
Mullen Burst Strength	psi	ASTM D3786	400

Table 2 – Non-Woven Geotextile Specifications

Property	Unit	Test Procedure	Specified Value
Apparent Opening Size (AOS)	US Sieve	ASTM D4751	45 (min.)
Permittivity	sec ⁻¹	ASTM D4491	0.05 (min.)
Grab Tensile Strength	pounds	ASTM D4632	200 (min.)
Trapezoid Tear Strength	pounds	ASTM D4533	75
Puncture Strength	pounds	ASTM D4833	75
Mullen Burst Strength	psi	ASTM D3786	200

- B. Drainage blanket shall be MDOT 6A Coarse Aggregate stone that meets the gradation requirements as shown in the following table.

Table 1 – Gradation requirements for MDOT 6A coarse aggregate stone (MTM 109)

U.S. Sieve (dia.)	% Passing
1-1/2" (50.0 mm)	100
1" (25.0 mm)	95-100
3/4" (19.0 mm)	-
1/2" (12.5 mm)	30-60
3/8" (9.5 mm)	-
No. 4 (4.75 mm)	0.8
No. 8 (2.36 mm)	-
No. 30 (0.60 mm)	-
Loss by Wash (No. 200 / 0.075 mm)	1.0 (max)

PART 3 - EXECUTION

3.1 SOIL STRIPPING

- A. Prior to the placement of the filter geotextile, the surface layer of vegetation and topsoil (or the top 6 inches, whichever is less) shall be stripped off of the entire construction area using a bulldozer or other appropriate machinery.
- B. Stripped vegetation and topsoil shall be disposed of in areas surrounding the proposed drainage blanket area as shown on the plans.
- C. Stripped soils shall be graded to match existing ground contours and prepared as necessary to receive surface restoration (seed and mulch).

3.2 SUBGRADE PREPARATION

- A. After stripping the topsoil, the underlying soil shall be prepared for geotextile placement under the following criteria:
1. The soil surface shall be graded in the direction of intended drainage with a slope of at least 2.0%. Slope shall be verified by survey or other Project Manager approved field engineering method.
 2. The underlying soil surface is to be freed of irregularities, protrusions, loose soil, and abrupt changes in grade.

3. Contractor shall ensure that the surface of the underlying soil does not contain stones which may be damaging to the geotextile.

3.3 DRAINAGE BLANKET GEOTEXTILE FILTER

- A. Geotextile shall be deployed in a manner which does not damage the geotextile and conforms to the following criteria:
 1. During placement of geotextiles, care shall be taken not to entrap, in or beneath the geotextile, stones or debris that could cause clogging of the filter.
 2. A visual examination of the geotextile shall be carried out over the entire surface, after installation, to ensure that no potentially harmful foreign objects are present.
 3. Geotextiles shall be overlapped a minimum of 24 inches.
 4. Repairs shall be in the form of a patch made from the same geotextile and shall overlap the damaged geotextile area by at least 24 inches in all directions.
 5. The geotextile filter shall be pinned down to eliminate uplift of the filter due to groundwater pressure. The geotextile shall be installed flat and smooth.

3.4 DRAINAGE BLANKET AGGREGATE

- A. Placement of aggregate on the geotextile filter shall conform to the following conditions:
 1. Placement of materials on the geotextile shall not generate excessive wrinkles and folds in the geotextile.
 2. Placement shall not cause damage to the geotextile nor cause excess tensile stresses in the geotextile.
 3. Equipment used for placing granular drainage materials shall not be driven directly on the geotextile.
 4. A minimum thickness of 1 foot of stone is required between any vehicle and the geotextile.

3.5 GRADING AND RESTORATION

- A. The Contractor shall grade the site to achieve a smooth transition to the contour of the existing surrounding land. Grading shall not extend beyond the limits shown on the plans without prior approval from the Owner.
- B. Where the excavation is located beside a ditch and/or where an existing ditch is filled or disturbed in the Contractor's operations, the Contractor shall clean, repair, or replace the ditch with properly pitched bottom and side slopes and of section and capacity not less than the original section.
- C. The spoil disposal area within the project grading limits is to be restored with seed and mulch per Section 02920 of these specifications.

- D. The Contractor shall restore all disturbed areas outside of the grading limits including but not limited to the site access route and temporary staging area to their original condition including fine grading, topsoil, seed and mulch and any other work as needed.

END OF SECTION

SECTION 02370

EROSION AND SEDIMENTATION CONTROLS

PART 1 - GENERAL

1.1 SUMMARY

- A. Furnish all labor, materials, equipment and incidentals required and perform all installation, maintenance, removal and area cleanup related to sedimentation control work as shown on the Drawings and as specified herein. The work shall include, but not necessarily be limited to; installation of temporary access ways and staging areas, silt fences, inlet protection devices, sediment removal and disposal, device maintenance, removal of temporary devices, temporary and permanent seeding, mulching and fertilization, and final cleanup. All erosion control devices shall remain in place throughout construction and until approval of final site stabilization is given by local or state authorities.

- B. The Contractor is responsible for implementing Best Management Practices (BMP's), as shown on the Contract Drawings and specified herein, to prevent and minimize erosion and resultant sedimentation in all cleared, grubbed, and active work areas during and after construction. This item covers the work necessary for the installation and maintenance of all structures and measures necessary for the prevention and control of soil erosion.

- C. The following items from Rule 1709 promulgated under the authority of Part 91, Soil Erosion and Sedimentation Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, are particularly important:
 - 1. Design, construct, and complete the earth change in a manner that limits the exposed area of disturbed land for the shortest period of time.
 - 2. Remove sediment caused by accelerated soil erosion from runoff water before it leaves the site of the earth change.
 - 3. Temporary or permanent control measures shall be designed and installed to convey water around, through, or from the earth change at a non-erosive velocity.
 - 4. Install temporary soil erosion and sedimentation control measures before or upon commencement of the earth change activity and maintain the measures on a daily basis. Remove temporary soil erosion and sedimentation control measures after permanent soil erosion measures are in place and the area is stabilized. ("Stabilized" means the establishment of vegetation or the proper placement, grading, or covering of soil to ensure its resistance to soil erosion, sliding, or other earth movement.)
 - 5. Complete permanent soil erosion control measures for the earth change within five (5) calendar days after final grading or upon completion of the final earth change. If it is not possible to permanently stabilize the earth change, then maintain temporary soil erosion and sedimentation control measures until permanent soil erosion control measures are in place and the area is stabilized.

1.2 RELATED SECTIONS

- A. Section 02300, Earthwork.
- B. Section 02950, Lawns and Grasses.

1.3 SUBMITTALS

- A. Submit to the Engineer, in accordance with Section 01330, Submittal Procedures, technical product literature for all commercial products to be used for sedimentation and erosion control.

1.4 QUALITY ASSURANCE

- A. The Contractor shall be responsible for the timely installation and maintenance of all sedimentation control devices necessary to prevent the movement of sediment from the construction site to offsite areas or into the stream system via surface runoff or underground drainage systems. Measures in addition to those shown on the Drawings necessary to prevent the movement of sediment off site shall be installed, maintained, removed, and cleaned up at the expense of the Contractor. No additional charges to the Owner will be considered.

1.5 REFERENCES

- A. Chapter 63 – Stormwater Management and Soil Erosion and Sedimentation Control, of the City of Ann Arbor City Ordinance.
- B. City of Ann Arbor Public Services Department Standard Specifications Manual, latest edition.
- C. Michigan Department of Environmental Quality Water Division Soil Erosion and Sedimentation Control Program, Soil Erosion and Sedimentation Control (SESC) Training Manual, 2004 Edition, or latest.
- D. Michigan Department of Transportation (MDOT) 2012 Standard Specifications for Construction.

1.6 EROSION AND SEDIMENTATION CONTROL DEVICES

- A. The following erosion and sedimentation control devices shall be incorporated into the work. Other devices, as necessary and acceptable to the Engineer shall be installed as required.
 - 1. Silt Fence shall be constructed at the locations shown on the Drawings, and at other locations indicated by the Engineer. Silt Fence shall not be installed across streams, ditches, or waterways. Silt Fence shall be designed, installed and maintained in accordance with the requirements of Unit 4 of the SESC Training Manual.

PART 2 -- PRODUCTS

2.1 MATERIALS

- A. Materials for use in erosion and sedimentation control devices shall be in accordance with the City of Ann Arbor Public Services Department Standard Specifications Manual, latest edition, and the Michigan Department of Environmental Quality Soil Erosion and Sedimentation Control (SESC) Training Manual, 2004 Edition, or latest edition.

2.2 SILT FENCE

- A. Silt Fence shall be a woven geotextile filter fabric made specifically for sediment control. Filter fabric shall not rot when buried and shall resist attack from soil chemicals, alkalides and acids in the pH range from 2 to 13, and shall resist damage due to prolonged ultraviolet exposure. Filter fabric shall be Type FX-11, as manufactured by Carthage Mills, Geotex 910SC as manufactured by Synthetic Industries, Inc., Amoco 2130 as manufactured by Amoco Fabrics & Fibers Co., or equal.

- B. Filter fabric for the silt fence shall have the following minimum properties:

	<u>Value</u>	<u>Test Method</u>
Grab Tensile Strength	100 lbs	ASTM D 4632
Grab Elongation	15%	ASTM D 4632
Trapezoid Tear Strength	50 lbs	ASTM D 4533
Mullen Burst Strength	265 lbs	ASTM D 3786
Puncture Strength	58 lbs	ASTM D 4833
Retained Strength (500 hrs. accelerated UV exposure)	80%	ASTM D 4355
Filtration Efficiency	75%	VTM-51
Flow Rate	10 gal/min/ft ²	ASTM-D4491
Height	36 inches	

- C. Posts for silt fence shall be steel and shall have the following properties:

ASTM Designation:	ASTM A702
Length:	5-Feet Long (T-Type)
Weight:	1.25#/Foot (min.)
Area of Anchor Plate:	14 Sq. In.

Note: Five (T) Fasteners shall be furnished with each post.

- D. Wire Fabric for the silt fence shall have the following properties:

Wire Fabric Designation:	832-12-10-12.5 Class 1
Designation:	ASTM A116
Width:	32"
Number of Line Wires:	8
Stay Wire Spacing:	12"
Line and Stay Wires:	12.5 Ga.
Top and Bottom Wires:	10 Ga.
Wire Coating:	ASTM Class 1 Zinc Coating

- E. Silt Fence shall be installed and maintained in accordance with Part 3 of this Section, and Unit 4 of the SESC Manual, to the satisfaction of the Engineer until the site has been stabilized. The cost of Silt Fence shall include the fabric, posts, wire fabric, excavation and all maintenance and restoration activities required.

2.3 STONE FOR EROSION CONTROL

- A. Crushed stone for sediment filtration devices, access ways and staging areas shall conform to MDOT Sections 208 and 307.

PART 3 – EXECUTION

3.1 INSTALLATION AND MAINTENANCE

- A. Erosion and sedimentation control devices shall be established prior to or concurrent with the clearing operations in a given area. Where such practice is not feasible, the erosion and sedimentation control device(s) shall be established immediately following completion of the clearing operation.
- B. The Contractor shall furnish the labor, materials and equipment required for routine maintenance of all erosion and sedimentation control devices. Maintenance shall be scheduled as required for a particular device to maintain the removal efficiency and intent of the device. Maintenance shall include but not be limited to 1) the removal and satisfactory disposal of accumulated sediment from traps or silt barriers and 2) replacement of filter fabrics used for silt fences and stone used in temporary sediment traps, stone filters, gravel construction entrances, etc.. Sediment removed from erosion and sedimentation control devices shall be disposed of in locations that will not result in offsite sedimentation as acceptable to the Engineer, at no additional cost to the Owner.
- C. The Contractor shall provide temporary sedimentation traps at all locations shown on the Contract Drawings and as per the approved SESC Plan for the settling of water pumped from the excavations or intercepted by drainage ditches for keeping water out of the excavations or to protect existing structures. The Contractor shall remove accumulated sediment from the traps as necessary to maintain their effectiveness or as indicated by the Engineer. Sediment material removed from the traps shall be disposed by the Contractor in locations that will not result in off-site sedimentation as acceptable to the Engineer, at no additional cost to the Owner.
1. Inspect temporary sediment traps after each period of significant rainfall. Remove sediment and restore the trap to its original dimensions when the sediment has accumulated to one-half the design depth of the trap. Place the sediment that is removed in a designated disposal area and replace the contaminated part of the gravel facing.

2. Check the structure for damage from erosion or piping. Periodically check the depth of the spillway to ensure it is a minimum of 1.5 ft. below the low point of the embankment. Immediately fill any settlement of the embankment to slightly above design grade. Any riprap displaced from the spillway must be replaced immediately.
 3. After all sediment-producing areas have been permanently stabilized, remove the structure and all unstable sediment. Smooth the area to blend with the adjoining areas and stabilize properly.
- E. Silt fence shall be erected as shown on the Drawings, as per the approved SESC Plan and specified herein. Silt fence shall be erected and maintained to the satisfaction of the Engineer until a vegetative ground cover has been established. Replacement of the filter fabric, if required by the Engineer, will be at the Contractor's expense.
1. Silt fence shall be erected around all catch basins which are located downstream from any construction work. Should any catch basins be indicated to be relocated or modified, silt fence shall be utilized until work is completed on the catch basins. Upon completion of the modification, the area shall be rough graded, as shown on the Drawings, until the end of the project, at which time final grading shall occur.
 2. Inspect silt fence at least once a week and after each rainfall. Make any required repairs immediately.
 3. Should the fabric of a silt fence collapse, tear, decompose or become ineffective, replace it promptly.
 4. Remove sediment deposits as necessary to provide adequate storage volume for the next rain and to reduce pressure on the fence. Take care to avoid undermining the fence during cleanout.
 5. Remove all fencing materials and unstable sediment deposits and bring the area to grade and stabilize it after the contributing drainage area has been properly stabilized. Removal of any silt fence shall be permitted only with the prior approval of the Engineer, or the local governing agency.

3.2 INSPECTIONS AND MAINTENANCE

- A. The Contractor shall designate a Certified Operator to perform inspections required by this Section. The following areas are to be inspected and maintenance performed, if needed, at least once every 7 calendar days and within 24 hours of a rainfall event that has a precipitation of 1/2 inch or greater.
1. Disturbed areas of the construction site that have not undergone final stabilization
 2. Erosion and sediment control structures, dust control measures
 3. All locations where vehicles enter or exit the site
 4. Material storage and construction laydown areas that are exposed to precipitation and have not been finally stabilized

- B. Immediate action will be taken to correct deficiencies to BMP's. The State or Local Authorities reserves the right to stop all construction activities not related to maintaining BMP's until such deficiencies are repaired.
- C. In areas that have been finally stabilized, inspections and, if necessary, maintenance by Contractor will occur at least once per month for the duration of the contract or project, whichever is longer.
- D. During inspections the following will be observed and appropriate maintenance procedures taken:
 - 1. The conformance to specifications and current condition of all erosion and sediment control structures
 - 2. The effectiveness and operational success of all erosion and sediment control measures
 - 3. The presence of sediments or other pollutants in storm water runoff at all runoff discharge points
 - 4. If reasonably accessible, the presence of sediments or other pollutants in receiving waters
 - 5. Evidence of dust being transported to any process tank on site
 - 6. Evidence of off-site tracking at all locations where vehicles enter or exit the site

3.3 REMOVAL OF TEMPORARY SEDIMENT CONTROL STRUCTURES

- A. At such time that temporary erosion and control structures are no longer required under this item, the Contractor shall notify the Engineer of its intent and schedule for the removal of the temporary structures, and obtain the Engineer's approval in writing prior to removal. Once the Contractor has received such written approval from the Engineer, the Contractor shall remove, as approved, the temporary structures and all sediments accumulated at the removed structure shall be returned upgrade. In areas where temporary control structures are removed, the site shall be left in a condition that will restore original drainage. Such areas shall be evenly graded and seeded as specified in Section 02920, Lawns and Grasses.

3.4 FINAL CLEANUP

- A. Once the site has been fully stabilized against erosion and all sediment control measures have been removed, dispose of accumulated silt and waste materials in proper manner. Re-grade all areas disturbed during this process and stabilize against erosion with surfacing materials as indicated on the Drawings.

END OF SECTION

SECTION 02920

LAWNS AND GRASSES

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Fine Grading
- B. Topsoil
- C. Fertilizers
- D. Seeding

1.2 RELATED SECTIONS

- A. Section 02300, Earthwork
- B. Section 02370, Erosion and Sedimentation Controls

1.3 SUBMITTALS

- A. Certification of grass seed from seed vendor for each grass-seed mixture stating the botanical and common name and percentage by weight of each species and variety, and percentage of purity, germination, and weed seed. Include the year of production and date of packaging.
- B. Certification of all fertilizers.
- C. Certified analysis of the topsoil from each source.

1.4 REFERENCES

- A. Michigan Department of Transportation 2012 Standard Specifications for Construction (MDOT)
- B. ASTM D5268 - Topsoil Used for Landscaping Purposes
- C. City of Ann Arbor Public Services Department Standard Specifications

1.5 DESCRIPTION

- A. The Contractor shall permanently prepare, fertilize, and seed the areas designated on the Plans or disturbed by the Contractor.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Seed: Deliver seed in original sealed, labeled, and undamaged containers, bearing seed analysis and the date of the seed testing. The testing shall be within a period of six months prior to commencement of planting operations.

- B. Fertilizer: Delivered in bags or other convenient containers, each fully labeled, conforming to applicable state fertilizer laws, bearing the grade and the trade name of the producer.
- C. The Contractor is responsible for proper storage & security of all seeding materials.

1.7 PROJECT CONDITIONS

- A. Weather Limitations: Proceed with planting only when existing and forecast weather conditions are suitable for work. At option and under full responsibility of Contractor, planting operations may be conducted under unseasonable conditions, but without additional compensation.

1.8 SCHEDULING

- A. Planting Season: Sow seed and install sod during normal planting seasons and per project schedule. Optimal time for seed is between April 1 and June 1, and between September 1 and October 15.

1.9 MAINTENANCE

- A. It is the responsibility of the Contractor to establish a dense lawn of permanent grasses, free from mound and depressions. Any portion of the sodded area that “browns-out” or does not firmly knit to the soil base, or any portion of a seeded area that fails to show a uniform germination, shall be re-sodded or re-seeded. Such re-sodding or re-seeding shall be at the Contractor’s expense and shall continue until a dense lawn is established.
- B. The Contractor shall maintain all lawn areas until they have been accepted by the Owner. Lawn maintenance shall begin immediately after the grass seed or sod is in place and continue until provisional acceptance.
 - 1. Lawns shall be protected and maintained by watering, mowing, and re-seeding as necessary for one year to establish a uniform weed-free stand of grasses and until specific lawn acceptance has been made. Contractor shall review lawn establishment on a minimum bi-weekly basis. Maintenance includes deposition of additional topsoil and re-sodding as may be required to correct all settlement and erosion until the date of final acceptance.
 - 2. At the time of the first cutting the lawn shall be 2-1/2 to 3-1/2 inches high, and the mower blades shall be set at 2-1/2 inches high. All lawns shall receive at least six mowings, with a minimum of 1 week between mowing, before acceptance.
 - 3. 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 three (3) percent of the area nor greater than 3” x3” in size.
 - 4. Owner will withhold \$4,000 from final payment and will release up to \$1,000 per quarter upon satisfactory completion of lawn and landscaping maintenance work.
- C. When the above requirements have been fulfilled, the Owner will accept the lawn.

PART 2 - PRODUCTS

2.1 TOPSOIL

- A. Topsoil shall meet the requirements of ASTM D5268 Topsoil shall not be contaminated or excessively acidic or alkaline, and shall be free of stones 1 inch or larger in any dimension. Topsoil shall consist of natural loam, sandy loam, silty loam, or clay loam humus-bearing soils adapted to sustain plant life.
- B. Topsoil Source: Reuse surface soil stockpiled on the site. Verify suitability of surface soil to produce topsoil meeting requirements and amend when necessary. Supplement with imported topsoil when quantities are insufficient. Clean topsoil of roots, plants, sods, stones, clay lumps, and other extraneous materials harmful to plant growth.

2.2 FERTILIZER

- A. Fertilizer shall meet the requirements of the MDOT Section 917.

2.3 SEED

- A. Permanent seed for lawn area restoration in the temporary staging and access route area shall meet the requirements of the MDOT Section 917 for:
 - 1. 65% Kentucky Bluegrass, 98% pure with an 85% germination factor.
 - 2. 25% Creeping Red Fescue, 97% pure with an 85% germination factor.
 - 3. 10% Perennial Ryegrass, 96% pure with a 85% germination factor.
- B. Permanent seeding for the spoil disposal area within the grading limits shall meet the requirements of MDOT Section 917 for roadside seeding.

2.4 MULCH

- A. Mulch shall meet the requirements of the MDOT Section 917 for straw mulch blankets. Mulch blankets shall be equal to Curlex Net-Free by American Excelsior.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Prior to seeding, Owner must approve condition of the seedbed. Inadequate seedbed preparation shall result in the reworking of the area to the complete satisfaction of the Owner.
- B. Do not proceed until unsatisfactory conditions have been corrected.
- C. The Contractor is solely responsible to determine the quantity of cut and fill required to complete the work and to locate a suitable source and amount of topsoil.

3.2 TOPSOIL PLACEMENT

- A. The application of topsoil shall occur only when conditions are favorable so as to minimize damage to the subgrade.

- B. Where undesirable soils exist within the subgrade, it will be the responsibility of the Contractor not to contaminate the topsoil during the replacement or finishing process. All undesirable soils or objects will be removed from the topsoil seedbed at the cost of the Contractor.
- C. Topsoil shall be placed and spread over the areas graded as shown on the plans in such a manner so that after compaction and natural settling the topsoil will conform to finished grades as shown.
- D. Provide a smooth transition between adjacent existing grades and new grades.
- E. Cut out soft spots, fill low spots, and trim high spots to comply with required surface tolerances.

3.3 FINE GRADING

- A. Areas to be planted shall be finish graded to provide surface drainage.
- B. Undulations and unsightly variations in grade which will not permit the use of normal mowing equipment without scalping shall be removed so that proper use of such equipment may be accomplished.
- C. Limit preparation to areas that will be planted in the immediate future.
- D. Loosen existing topsoil to a minimum depth of 4 inches. Remove stones, sticks, roots, rubbish, and other extraneous matter larger than 1 inch in any dimension.
- E. Mix soil amendments and fertilizers with new topsoil per recommendations from soil report. Delay mixing fertilizer if planting does not follow placing of topsoil within a few days. Either mix soil before spreading or apply soil amendments and fertilizers on surface of spread topsoil and mix thoroughly into top 4 inches of topsoil before planting

3.4 PERMANENT SEEDING

- A. In the access route and temporary staging areas, if required, topsoil shall be spread to a depth of 4 inches unless otherwise shown on the Plans. Placement of topsoil shall conform to MDOT Section 816. Additional topsoil is not required within the grading limit spoil disposal area.
- B. All areas to be seeded or sodded shall be fertilized in accordance with MDOT Section 816. Contractor shall provide all necessary soil tests to determine fertilizer needs.
- C. Permanent seeding shall conform to MDOT Section 816. Seeding rate shall be 300 lb/acre.
- D. Fertilizing shall conform to all local restrictions.
- E. Sodding shall conform to MDOT Section 816

3.5 MULCHING

- A. Straw mulch blankets shall be applied to all seeded areas. Blankets shall be attached with biodegradable wooden pegs per the manufacturer's recommendations.

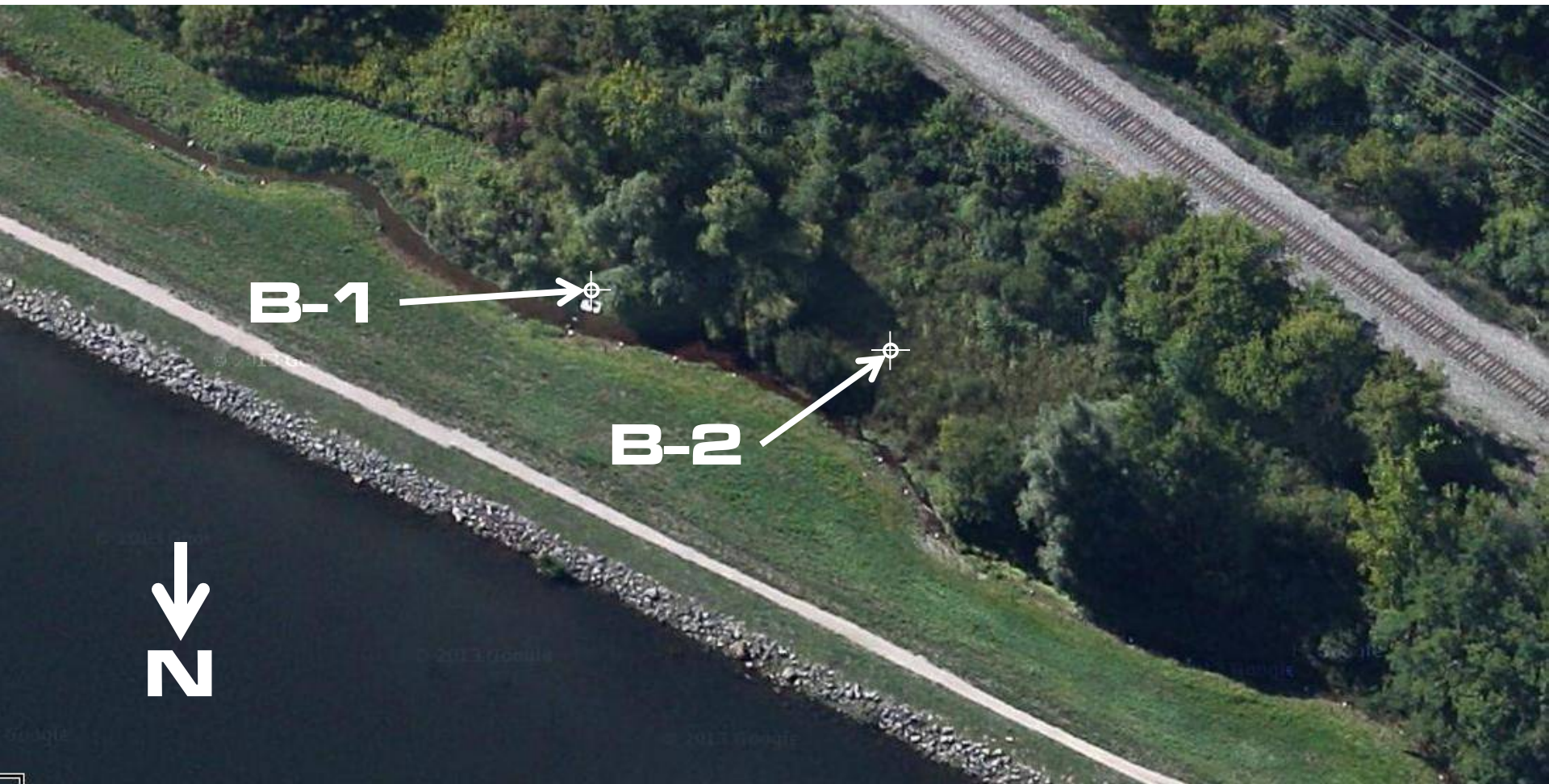
3.6 PROTECTION

- A. Erect barricades and warning signs as required to protect newly planted areas from traffic. Maintain barricades throughout maintenance period until lawn is established.

END OF SECTION

**Appendix A
CTI Soils Report
(Excerpt)**

Geotechnical Boring Plan – Boring Plan Locations



Geotechnical Boring Plan – Boring Locations

BORING B-1 LOCATION
SAMPLES: 1 FT, 3 FT



DRAIN 35



SAND BOIL



CAUTION: SOFT GROUND



Geotechnical Boring Plan – Boring Locations

BORING B-2 LOCATION
SAMPLES: 1 FT, 3 FT



DRAIN 40



CAUTION: SOFT GROUND



ATTACHMENT 2
SOIL BORING LOGS



CTI and Associates Inc

BORING NUMBER B-1

PAGE 1 OF 1

CLIENT Stantec
PROJECT NUMBER 2138070008
DATE STARTED 2/5/13 **COMPLETED** 2/5/13
DRILLING CONTRACTOR CTI and Associates, Inc.
DRILLING METHOD Hand Auger
LOGGED BY D. Cook **CHECKED BY** T. Marsik
NOTES Boring backfilled with excavated soil

PROJECT NAME Barton Dam Right Embankment Seepage Engineering
PROJECT LOCATION Ann Arbor, Michigan
GROUND ELEVATION +/-
GROUND WATER LEVELS:
DURING DRILLING 0' 1"
AFTER DRILLING 0' 1"
COLLAPSE DEPTH 0' 1"

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf) UNC. STRENGTH (psf)	MOIST UNIT WT. (pcf)	▲ SPT N VALUE ▲		
								20	40	60
0.0										
		Black wet fine to medium SAND with silt and organics and trace of gravel - (SM)	HA 1	100						
2.5		Gray wet fine to coarse SAND with silt and some gravel - (SM)	HA 2	100						

Bottom of borehole at 3.7 feet.



CTI and Associates Inc

BORING NUMBER B-2

PAGE 1 OF 1

CLIENT Stantec
PROJECT NUMBER 2138070008
DATE STARTED 2/5/13 **COMPLETED** 2/5/13
DRILLING CONTRACTOR CTI and Associates, Inc.
DRILLING METHOD Hand Auger
LOGGED BY D. Cook **CHECKED BY** T. Marsik
NOTES Boring backfilled with excavated soil

PROJECT NAME Barton Dam Right Embankment Seepage Engineering
PROJECT LOCATION Ann Arbor, Michigan
GROUND ELEVATION +/-
GROUND WATER LEVELS:
DURING DRILLING 0' 3"
AFTER DRILLING 0' 3"
COLLAPSE DEPTH 0' 3"

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf) UNC. STRENGTH (psf)	MOIST UNIT WT. (pcf)	▲ SPT N VALUE ▲			
								20	40	60	80
0.0								PL	MC	LL	
								20	40	60	80
								□ FINES CONTENT (%) □			
								20	40	60	80
2.5		Black wet gravelly fine to coarse SAND with silt and organics - (SM)	HA 1								
		Gray wet gravelly fine to coarse SAND with some silt - (SP-SM)	HA 2								

Bottom of borehole at 4.0 feet.

Appendix B
MDEQ WATER RESOURCES
DIVISION PERMIT



**MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER RESOURCES DIVISION
PERMIT**

ISSUED TO:

Mr. Brian Steglitz
City of Ann Arbor
Water Treatment Plant
919 Sunset Road
Ann Arbor, MI 48103

Permit No.	13-81-0016-P
Issued	July 24, 2013
Extended	
Revised	
Expires	July 24, 2018

This permit is being issued by the Michigan Department of Environmental Quality (MDEQ) under the provisions of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), and specifically:

- | | |
|---|---|
| <input checked="" type="checkbox"/> Part 301, Inland Lakes and Streams | <input type="checkbox"/> Part 315, Dam Safety |
| <input type="checkbox"/> Part 325, Great Lakes Submerged Lands | <input type="checkbox"/> Part 323, Shorelands Protection and Management |
| <input checked="" type="checkbox"/> Part 303, Wetlands Protection | <input type="checkbox"/> Part 353, Sand Dunes Protection and Management |
| <input type="checkbox"/> Part 31, Floodplain/Water Resources Protection | |

Permission is hereby granted, based on permittee assurance of adherence to State of Michigan requirements and permit conditions, to:

Permitted Activity:

Excavate 265 cubic yards of material from 0.327 acre of wetland and stream (toe drain) and place 530 cubic yards of clean fill within the same area to construct a drainage blanket to stabilize embankment seepage as required by the Federal Energy Regulatory Commission. All work shall be completed in accordance with the attached plans and specifications of this permit.

Water Course Affected: Barton Pond/Huron River
Property Location: Washtenaw County, City of Ann Arbor, Section 17
 Subdivision, Lot Town/Range 2S, 6E 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, Water Resources Protection, 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 Act 53 of the Public Act of 1974 and comply with each of the requirements of that Act.
- 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 the MDEQ within one week after the completion of the activity authorized by this permit, by completing and forwarding the attached preaddressed postcard to the office addressed thereon.
- J. This permit shall not be assigned or transferred without the written approval of the MDEQ.

- 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, and wetland).
- M. In issuing this permit, the MDEQ 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, the MDEQ 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 representatives of the permittee undertaken in connection with this 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, the MDEQ 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 the MDEQ. 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 the MDEQ prior to being implemented.
- Q. This permit may be transferred to another person upon written approval of the MDEQ. The permittee must submit a written request to the MDEQ to transfer the permit to the new owner. The new owner must also submit a written request to the MDEQ to accept transfer. The new owner must agree, in writing, to accept all conditions of the permit. A single letter signed by both parties which includes all the above information may be provided to the MDEQ. The MDEQ 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.
- 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 waterbody 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 MDNR, Fisheries Division.
- Y. Work to be done under authority of this permit is further subject to the following special instructions and specifications:

- 1) Notification shall be made to the MDEQ's Water Resources Division, five days prior to starting the project. Please notify James Sallee, at:

Michigan Department of Environmental Quality
Jackson State Office Building, 4th Floor
301 East Louis Glick Highway
Jackson, Michigan 49201
Telephone: (517) 780-7910
E-mail: salleej@michigan.gov

- 2) Prior to the initiation of any permitted construction activities, a siltation barrier shall be constructed immediately down gradient of the construction site. Siltation barriers shall be specifically designed to handle the sediment type, load, water depth, and flow conditions of each construction site throughout the anticipated time of construction and unstable site conditions. The siltation barrier 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 (non-wetland, non-floodplain) site. The siltation barrier shall then be removed in its entirety and the area restored to its original configuration and cover.

3) IDENTIFICATION OF NON-WORK AREAS

Prior to the start of construction, all non-work wetland areas shall be bounded by properly trenched filter fabric fence and orange construction fencing to prevent sediment from entering the wetland and to prohibit construction personnel from entering or performing work in these areas. Fence shall be maintained daily throughout the construction process. Upon project completion, the accumulated materials shall be removed and disposed of at an upland site. The erosion barrier shall then be removed in its entirety and the area restored to its original configuration and cover.

- 4) All slurry resulting from any dewatering operation shall be discharged through a filter bag or pumped to a sump located away from wetlands and surface waters and allowed to filter through natural upland vegetation, gravel filters, or other engineered devices for a sufficient distance and/or period of time necessary to remove sediment or suspended particles.
- 5) All raw areas resulting from the permitted construction activity shall be promptly and 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.
- 6) All fill/backfill shall consist of clean inert material that will not cause siltation nor contain soluble chemicals, organic matter, pollutants, or contaminants. All fill shall be CONTAINED in such a manner so as not to erode into any surface water, floodplain, or wetland. All raw areas associated with the permitted activity shall be STABILIZED with sod and/or seed and mulch, riprap, or other technically effective methods as necessary to prevent erosion.
- 7) No fill, excess soil, or other material shall be placed in any wetland or surface water area not specifically authorized by this permit, its plans, and specifications.
- 8) This permit is limited to authorizing the construction as specified above and carries with it no assurances or implications that associated wetland or floodplain areas can be developed and serviced by the structures authorized by this permit.
- 9) 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.
- 10) Please provide the name, address, and telephone number of the person responsible for compliance of these permit conditions, and who has the authority to stop work on the project, whom the MDEQ shall contact if necessary:

Name:

Print BRIAN STEGLITZSign Brian SteglitzDate 7-18-13Address 919 SUNSET RDANN ARBOR, MI 48103Telephone Number 734 794 6426 x43905FAX Number 734 994 0151

- 11) This permit is being issued for the maximum time allowed under Part 301, Inland Lakes and Streams and Part 303, Wetlands Protection, of the Natural Resources and Environmental Protection Act, PA 451 of 1994, as amended, including all permit extensions allowed under the administrative rules R 281.813 and R 281.923. Therefore, 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 the MDEQ, will be for a five-year period beginning at the date of issuance.
- 12) This permit shall become effective on the date of the MDEQ representative's signature. Upon signing by the permittee named herein, this permit must be returned to the MDEQ's Water Resources Division for final execution.

Permittee hereby accepts and agrees to comply with the terms and conditions of this permit.

X Brian Steglitz 7-18-13
Permittee Date

X BRIAN STEGLITZ, SR UTILITIES ENGINEER
Printed Name and Title of Permittee

By: James Sallee
James Sallee
Water Resources Division
517-780-7910

cc: Mr. Glen Wiczorek, Stantec Consulting Michigan, Inc.



Notice of Authorization

Permit Number 13-81-0016-P

Issued: 07/24/2013

Expiration Date: 07/24/2018

The Michigan Department of Environmental Quality, 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, and 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 activity:

Excavate 265 cubic yards of material from 0.327 acre of wetland and stream (toe drain) and place 530 cubic yards of clean fill within the same area to construct a drainage blanket to stabilize embankment seepage as required by the Federal Energy Regulatory Commission. All work shall be completed in accordance with the permit plans and specifications of the permit.

To be conducted at property located in: Washtenaw County, Waterbody: Barton Pond/Huron River
Section 17 , Town 2S, Range 6E, City of Ann Arbor.

Permittee: City of Ann Arbor
Water Treatment Plant
919 Sunset Road
Ann Arbor, MI 48103

James Sallee
Water Resources Division
517-780-7910

*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.