

ADDENDUM No. 1

ITB No. 4517

First Sister Lake Stormwater Retrofit

Due: December 19, 2017 by 10:00 am (local time)

The following changes, additions, and/or deletions shall be made to the Invitation to Bid for First Sister Lake Stormwater Retrofit ITB No. 4517, on which proposals will be received on/or before December 19, 2017 at 10:00 A.M. (local time)

The information contained herein shall take precedence over the original documents and all previous addenda (if any), and is appended thereto. **This Addendum includes twelve (12) pages and three (3) plan sheets.**

Bidder is to acknowledge receipt of this Addendum No. 1, including all attachments in its Bid by so indicating on page ITB-1 of the Invitation to Bid Form. Bids submitted without acknowledgement of receipt of this addendum may be considered nonconforming.

The following forms provided within the ITB Document must be included in submitted bids at bid opening.

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

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

I. CORRECTIONS/ADDITIONS/DELETIONS

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

Section/Page(s)	Change
Plan Sheet 5	Replace with new Sheet 5, Labelled Addendum 1 Limits of work revised. Note added regarding felled trees.
Plan Sheet 6	Replace with new Sheet 6, Labelled Addendum 1 Limits of work revised. Added note regarding sand placement. Added note regarding curb replacement.
Plan Sheet 8	Replace with new Sheet 8, Labelled Addendum 1 Seed mix revised.
Bid Form, BF-1	Replace with new page BF-1, Labelled Addendum 1 Include pay items for sand and curb

Section/Page(s)	Change
Sec 01025	Replace with new Section 01025, Labelled Addendum 1 Measurement and payment revised to include sand and curb items
DS-3	Replace with new page DS-3, Labelled Addendum 1 Detailed Specification for Project Scheduling revised for tree cutting to start March 21, 2018; and completion of tree cutting by March 31, 2018.

II. QUESTIONS AND ANSWERS

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

Question 1: Fieldstone Slab 6-12" thick 2'-4' x 2'-4', Are you referring to Natural fieldstone boulders or are you looking for lifted limestone?

Answer 1: The slabs may be either natural fieldstone or limestone, but must conform with sizes provided.

Question 2: Is there any soil boring information available for the excavation area?

Answer 2: No.

Question 3: Are there any known brush invasive species such as phragmites within the clearing limits? If so, how are they to be handled?

Answer 3: There may be invasive species may be within the clearing limits, but they have not been inventoried. All cleared vegetation, including invasive species, is to be disposed of legally off site.

Question 4: Is the tree removal in this project subject to the Indiana bats deadline, which would be March 31st, 2018? The project start date isn't until after that date.

Answer 4: The project schedule has been revised with a start of construction date of March 21, 2018 for tree cutting, and completion by March 31, 2018.

Question 5: Are all permit fees waved by the City? Contractor just needs to pull the appropriate permits?

Answer 5: Correct. Contractor must obtain City permits, but fees are waived.

Question 6: Will the City be providing the Testing Agency or does the contractor need to provide the Testing Agency?

Answer 6: The City will hire the testing agency.

Question 7: Can you provide a gradation specification for the crushed limestone fines material?

Answer 7: Crushed limestone to be MDOT Class III, with grain size less than ¼".

Question 8: Can the power line to the light poles along the west curb of Park Lake be de-energized for a period of time to allow for loading of excavated materials from the site onto trucks? Are the lights DTE or City owned?

Answer 8: The street lights are under DTE jurisdiction. The City may be agreeable to a limited number of temporary street light outages. The contractor would need to coordinate with DTE, and propose a plan for this.

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

BID FORM

Section 1–Schedule of Prices

Company: _____

Project: First Sister Lake Stormwater Retrofit

File #: 2016-033 ITB No.: 4517

<u>Item</u>	<u>Description</u>	<u>Unit</u>	<u>Estimated Quantity</u>	<u>Unit Price</u>	<u>Total Price</u>
1	Mobilization	LS	1	\$ _____	\$ _____
2	Construction Staking	LS	1	\$ _____	\$ _____
3	Soil Erosion and Sediment control	LS	1	\$ _____	\$ _____
4	Traffic Control	LS	1	\$ _____	\$ _____
5	As-Built Survey and Drawings	LS	1	\$ _____	\$ _____
6	Certified Payroll Compliance and Monitoring	LS	1	\$ _____	\$ _____
7	Clearing and Grubbing	LS	1	\$ _____	\$ _____
8	Pipe Removal	LF	50	\$ _____	\$ _____
9	Manhole, Type III	EA	1	\$ _____	\$ _____
10	Pipe, Concrete, 24-inch C76 CI IV	LF	20	\$ _____	\$ _____
11	Pipe Outlets, Concrete, Size Specified	EA	2	\$ _____	\$ _____
12	Earthwork	LS	1	\$ _____	\$ _____
13	Topsoil	CY	500	\$ _____	\$ _____
14	Erosion Control Blanket	SY	3000	\$ _____	\$ _____
15	Riprap for Overflow and Aprons	CY	100	\$ _____	\$ _____
16	Fieldstone slabs	EA	200	\$ _____	\$ _____
17	Sand Habitat	CY	5	\$ _____	\$ _____
18	Native Seed	AC	1	\$ _____	\$ _____
19	Turf Seed	AC	1	\$ _____	\$ _____
20	Plugs	EA	12600	\$ _____	\$ _____
21	Shrubs	EA	25	\$ _____	\$ _____
22	Path	LF	130	\$ _____	\$ _____
23	Curb	LF	30	\$ _____	\$ _____
24	Site Restoration	LS	1	\$ _____	\$ _____
25	Landscape Maintenance	MO	12	\$ _____	\$ _____
26	Allowance for unforeseen site conditions	Dollars	15000	\$ 1.00	\$ 15,000.00
				TOTAL BASE BID:	\$ _____

SECTION 01025

MEASUREMENT AND PAYMENT

PART 1 GENERAL

1.01 SCOPE OF WORK

This section describes the method of measurement and basis of payment for all items of work included in the Contract and listed in the Bid Form. The CONTRACTOR shall provide all labor, material, tools, equipment and services required to complete the Work as specified and as indicated on the Drawings. Permits may be required for the completion of the Work of this Contract. All necessary permitting shall be incidental to the cost of the Work. Testing may be required to verify compliance with the Contract Documents. All necessary testing shall be at cost to the Contractor, and therefore, shall be included in the cost to complete the Work as specified here within. THE OWNER ONLY WILL PAY FOR ITEMS ON THE BID FORM, AND WILL MAKE NO PAYMENT FOR ITEMS NOT INCLUDED ON THE BID FORM.

1.02 RELATED WORK

- A. Bid Form.
- B. Section 01010, Summary of Work.
- C. Section 01020, Allowances.
- D. Section 01310, Work Plan.

1.03 PAYMENT ITEMS

GENERAL

ITEM NO. 1 - Mobilization

Mobilization will be paid for at the Contract lump sum (LS) amount (not to exceed 5% of the total Contract Price). Price paid shall be payment in full for all labor, material, and equipment necessary for all preparatory work and operations, including but not limited to, the movement of personnel, equipment, supplies, and incidentals to the project site. Mobilization shall also include preconstruction costs, including permit fees and premiums for insurance and bonds, exclusive of bidding costs, which are necessary direct costs to the project and are of a generalized nature rather than directly attributable to other pay items under this Contract. This pay item shall also include all costs associated with De-Mobilization. This pay item shall include:

- the establishment of staging/storage areas;
- the establishment of construction facilities and temporary controls;

- obtaining and permit fee for all necessary SESC and/or other permits required for construction;
- installation and maintenance of construction fencing;
- installation of soil erosion and sedimentation controls;
- preparation of schedules and submittals (including Work Plan and Technical Work Plans);
- other work and operations which must be performed or for expenses incurred, prior to beginning work;
- Traffic Control as needed; and
- All costs associated with De-Mobilization.

Payment for mobilization will be based upon the following schedule:

Partial Payment Schedule

<u>Percentage of Total Contract Price Earned</u>	<u>Percentage of Bid Price for Mobilization Allowed</u>
5	50
10	75
25	100

ITEM NO. 2 – Construction Staking

Construction staking will be paid for at the Contract lump sum (LS) amount. Price paid shall be payment in full for all labor, material and equipment required for staking and maintaining staking in the project area as required to provide site control, control grading, and all other site activities during all stages of the Work in order to construct the project in conformance with the Contract Documents.

ITEM No. 3- Soil Erosion and Sediment Control

Soil Erosion and Sediment Control will paid for at the Contract lump sum (LS) amount. Price paid shall be payment in full for all labor, material and equipment required for providing soil erosion and sediment control measures in the project area as required to provide adequate protection from site runoff through sheet flow and/or into structures, and all other site activities, during all stages of the Work in order to construct the project within the boundaries shown on the Plans and in conformance with the Contract Documents.

ITEM No. 4- Traffic Control

Traffic Control will paid for at the Contract lump sum (LS) amount. Price paid shall be payment in full for all labor, material and equipment required for providing traffic control measures in the project area as required during all stages of the Work in order to construct the project within the boundaries shown on the Plans and in conformance with the Contract Documents.

ITEM NO. 5 – As Built Survey and Drawings

City of Ann Arbor
 First Sister Lake
 Stormwater Retrofit
 Project

01025-2

Section 01025 Measurement and Payment

As-Builts will be paid for at the Contract lump sum (LS) amount. Price paid shall be payment for all labor, material, and equipment required for complete and submit as-built documents at completion of the work and shall include, but is not limited to:

- supply one set of marked up working drawings as marked up in the field during construction;
- supply three hard copies of as-built documents as conducted by a Professional Engineer or Surveyor;
- supply one digital copy of as-built survey as conducted by a Professional Engineer or Surveyor; and
- other items necessary to complete the work.

ITEM NO. 6 – Certified Payroll Compliance and Monitoring

This item will be paid at the Contract lump sum (LS) amount. Price paid shall be payment for all labor, material, and equipment required for complete and submit required documentation.

ITEM NO. 7 – Clearing and Grubbing

Clearing and grubbing will be paid for at the Contract lump sum (LS) amount. Price paid shall be payment in full for all labor, material and equipment required for clearing and grubbing and tree removal as shown in Drawings and shall include but is not limited to:

- removal of existing stumps, trees and brush at locations shown on the Drawings;
- sign removal and stockpile as directed by the City;
- bench removal, wall removal and path removal;
- removal of miscellaneous materials and debris within the project limits,
- disposal off-site of cleared and demolish materials as approved by the ENGINEER, and;
- all other items necessary to complete the work.

ITEM NO. 8 – Pipe Removal

Pipe Removal will be paid for at the Contract unit price (LF) amount. Price paid shall be payment in full for all labor, material and equipment required to perform pipe removal to the extent shown on the Drawings or as directed by the ENGINEER and shall include but is not limited to:

- excavation and sawcutting required for pipe removal;
- bulkheading of manhole structure as required;
- pipe removal;
- backfill of excavation as required;
- haul and legal disposal of demolition materials; and
- all other items necessary to complete the work.

ITEM NO. 9 – Manhole, Type III

Manhole will be paid for at the Contract unit price (EA), which price shall be payment in full for furnishing the materials, including the required fittings, frames, lids, grates, drop connections and steps, and for all labor, equipment and tools, all necessary excavation, backfilling, disposal of surplus material, and all work

incidental to the completed manhole.

- 48-inch diameter, slab (flat) top manhole
- EJ 1046Z Frame, or Engineer approved equal
- EJ 1040 M2 Trout Logo Grate, or Engineer approved equal

ITEM NO. 10 – Pipe

Pipe will be paid for at the Contract unit price (LF) amount. Price paid shall be payment in full for all labor, material and equipment required to furnish and perform the installation of the storm and drainage pipe to the extent shown on the Drawings or as directed by the ENGINEER and shall include, but is not limited to:

- protection of existing improvements;
- protection of existing utilities;
- trench excavation;
- furnish and placement and compaction of pipe bedding;
- furnish and placement of 24" C76 CI IV storm sewer pipe;
- furnish and installation and compaction of backfill;
- connection and sealing of proposed 24" storm pipe to existing storm structures;
- furnish and installation of any fittings;
- provide certification and testing services as required;
- furnish and place compacted backfill; and
- All other items necessary to complete the work.

ITEM NO. 11 – Pipe Outlets

Pipe Outlets shall be paid for on a Contract unit price (EA) amount. Price paid shall be payment in full for all labor, material and equipment required to furnish materials and perform installation of headwall replacement and end section replacement at storm sewer outlet to the extent shown on the Drawings or as directed by the ENGINEER and shall include, but is not limited to:

- All grading required for the outlet ;
- Furnish and install concrete end section; and
- All other items necessary to complete the work.

ITEM NO. 12 – Earthwork

Earthwork will be paid for at the Contract lump sum (LS) amount. Price paid shall be payment for all labor, material, and equipment required to perform the excavation for the basin, rough and fine grading, grading for the overflow weirs to the extent shown on the Drawings or as directed by the ENGINEER and shall include, but is not limited to:

- protection of existing improvements;
- protection of existing utilities;
- excavation of basin;
- dewatering
- disposal of excavated material in a legal manner off-site;
- rough and fine grading at basin
- rough and fine grading for outlets; and
- all other items necessary to complete the work.

ITEM NO. 13 –Topsoil

Topsoil shall be paid for on a Contract unit price (CY) amount. Price paid shall be payment in full for all labor, material and equipment required to perform topsoil placement at locations shown on the Drawings or as directed by the ENGINEER and shall include, but is not limited to:

- furnish and install topsoil;
- final grading of topsoil;
- all other items necessary to complete the work.

ITEM NO. 14 –Erosion Control Blanket

Erosion Control Blanket shall be paid for on a Contract unit price (SY) amount. Price paid shall be payment in full for all labor, material and equipment required to perform erosion control blanket placement at locations shown on the Drawings or as directed by the ENGINEER and shall include, but is not limited to:

- furnish and install erosion control blanket;
- all other items necessary to complete the work.

ITEM NO. 15–Riprap for Overflow and Aprons

Overflow will be paid for at the Contract unit price (CY) amount. Price paid shall be payment for all labor, material, and equipment required to perform the grading and placement of materials for the overflow and aprons to the extent shown on the Drawings or as directed by the ENGINEER and shall include, but is not limited to:

- protection of existing improvements;
- protection of existing utilities;
- fine grading for overflow and aprons;
- furnish and install geotextile fabric for overflow and aprons;
- furnish and install riprap for overflow and aprons; and
- all other items necessary to complete the work.

ITEM NO. 16 – Fieldstone slabs

Fieldstone slabs will be paid for at the Contract unit price basis (EA). Price paid shall be payment in full for all labor, material and equipment required for installing as shown on Drawings and shall include but is not limited to:

- acquiring and hauling slabs to the site;
- furnish and install slabs as shown on the Drawings or as directed by Engineer, and;
- all other items necessary to complete the work

ITEM NO. 17 – Sand Habitat

Sand habitat will be paid for at the Contract unit price basis (CY). Price paid shall be payment in full for all labor, material and equipment required for installing as shown on Drawings and shall include but is not limited to:

- acquiring and hauling sand to the site;
- placement of sand as shown on the Drawings or as directed by Engineer, and;
- all other items necessary to complete the work

ITEM NO. 18 – Native Seed

Native Seed will be paid for at the Contract unit price (AC) amount. Price paid shall be payment for all labor, material, and equipment required to furnish and perform installation of seed, to the extent shown on the Drawings or as directed by the ENGINEER and shall include, but is not limited to:

- soil erosion and sedimentation control;
- furnish and installation of seed mix;
- associated watering and fertilizing;
- a two-year warranty for plant survivability; and
- all other items necessary to complete the work.

ITEM NO. 19 – Turf Seed

Turf Seed will be paid for at the Contract unit price (AC) basis. Price paid shall be payment in full for all labor, material and equipment required to seed to the extent shown on the Drawings and using specified seed mixes and shall include, but is not limited to:

- soil erosion and sedimentation control;
- furnish and installation of seed mix;
- furnish and installation of erosion control blanket and/or mulch;
- associated watering and fertilizing;
- a two-year warranty for plant survivability; and
- all other items necessary to complete the work.

ITEM NO. 20 – Plugs

Plugs will be paid for at the Contract unit price for each (EA). Measurement shall be based on Contract Drawings and installation approved by ENGINEER. Price paid shall be payment in full for all labor, material and equipment required to install the plugs at the spacing and to the extents shown on the Drawings and shall include, but is not limited to:

- Acquiring and delivering plug material to the site;
- Acquiring approval for alternate species from ENGINEER prior to installation;
- Acquiring approval of delivered stock from ENGINEER prior to installation;
- Installing plugs at approximate spacing and locations shown on Drawings;
- Installing plugs using commonly accepted practices;
- 2-year warranty for plant survivability;
- All other items necessary to complete the work.

ITEM NO. 21 – Shrubs

Shrubs will be paid for at the Contract unit price basis for each (EA). Price paid shall be payment in full for all labor, material and equipment required to acquire and plant shrubs to the extent shown on the Drawings and using specified installation techniques and shall include, but is not limited to:

- Acquiring and delivering shrubs to the site;
- Acquiring approval for alternate shrub species from ENGINEER prior to installation;
- Acquiring approval of delivered stock from ENGINEER prior to installation;
- Installing shrubs at approximate spacing and locations shown on Drawings;
- Use of acceptable planting techniques;
- Coordination with any other landscaping or site work;
- 2-year maintenance and warranty;
- All other items necessary to complete the work.

ITEM NO. 22 – Path

Path will be paid for at the Contract unit length (LF) amount, measured along the centerline. Price paid shall be payment in full for labor, materials, and equipment required install the Path. This shall include, but is not limited to:

- all excavation and grading required for the path;
- furnishing and installation of compacted aggregate base;
- compaction as required;
- testing services as required; and
- all other items necessary to complete the work.

ITEM NO. 23 – Curb

Curb will be paid for at the Contract unit length (LF) amount. Price paid shall be payment in full for labor, materials, and equipment to remove the existing curb drop at the existing path and replace with full curb; and remove standard curb and replace with curb drop at the new path location, and all other items necessary to complete the work, including:

- sawcutting, excavation and removal
- compacting base
- placing and forming F4 type curb
- backfilling
- HMA patching

ITEM NO. 24 – Site Restoration

Site Restoration will be paid for at the Contract lump sum (LS) amount. Price paid shall be payment for all labor, material, and equipment required for complete site restoration and shall include but is not limited to:

- grading, furnish and placement of topsoil of disturbed areas
- disking/tilling as necessary to create a suitable seedbed area;
- seeding disturbed areas;
 1. soil testing
 2. furnish and install topsoil
 3. furnish and install seed
 4. furnish and install erosion control measures/mulching
 5. associated watering and fertilizing
- removal temporary fencing/gates;
- removal of construction and silt fencing; and

- cleaning.

ITEM NO. 25 – Landscape Maintenance

Landscape Maintenance shall be paid for on a Contract unit price amount (MO) for 12 months. Price paid shall be payment in full for all labor, material and equipment required to perform vegetation maintenance as needed for remedying conditions during the growing season, to the extent shown on the Drawings or as directed by the ENGINEER and shall include, but is not limited to:

- soil erosion and sedimentation controls;
- associated watering;
- invasive species removal; and,
- all other items necessary to complete the work.

ITEM NO. 26 – Allowance for Unforeseen Site Conditions

Unforeseen Site Conditions will be paid for at the negotiated price after the Work has been authorized by the ENGINEER. Price paid shall be payment in full for all labor, material, and equipment required for remedying unforeseen physical conditions and shall be based upon an agreement negotiated and approved prior to beginning this Work.

PART 2 PRODUCTS (NOT USED)
PART 3 EXECUTION (NOT USED)

END OF SECTION

**DETAILED SPECIFICATION
FOR
PROJECT SCHEDULING**

The Contractor shall begin work on this Contract within one week of the receipt of the Notice to Proceed. In no case shall any work begin prior to receipt of a formal notice of award by the City of Ann Arbor.

Tree cutting shall commence by March 21, 2018 and be completed by March 31, 2018. The estimated start date of other construct activities is April 1, 2018.

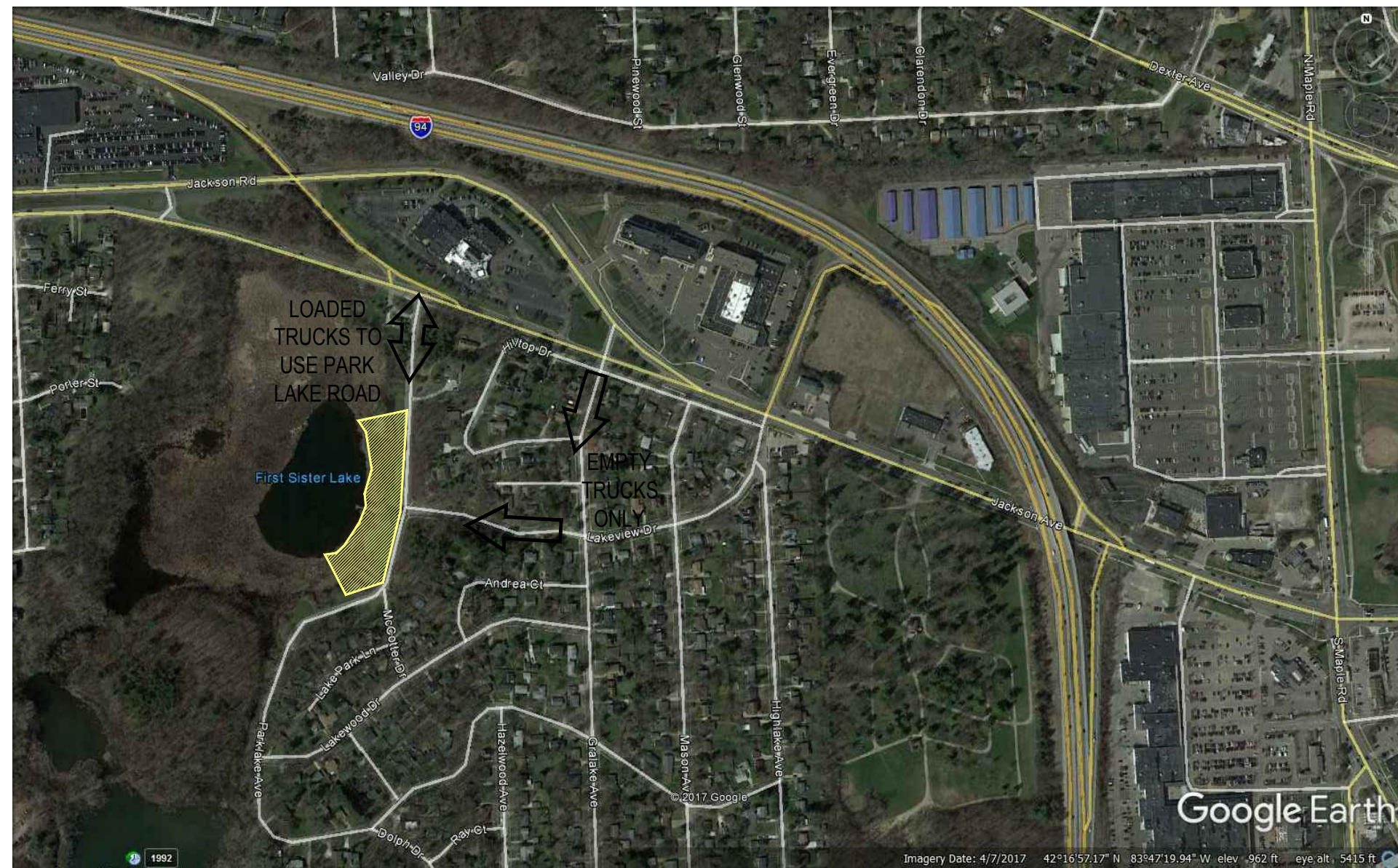
The entire work on this contract, including all cleanup and restoration (but excluding Landscape Maintenance) shall be completed on or before July 1, 2018.

This project is on an expedited schedule. Time is of the essence in the performance of the work of this contract. The Contractor shall organize its operations and mobilize sufficient personnel and equipment, and work the required overtime to complete the project within the timeframe specified herein.

Failure to initiate and/or complete work by the above described timeframe shall require the Contractor to pay the City as Liquidated Damages, and not as penalty, the sum of \$500 dollars for each and every calendar day that the Contractor may be in default of initiation and/or completion of the specified work, within the time stated, or time extension(s) granted thereto.

All liquidated damages amounts are additive and may be charged concurrently. Should the Engineer approve a request for an extension of contract time, liquidated damages will be based on the revised time for which the extension specifically applies.

Costs for the Contractor to organize, coordinate, and schedule all of the work of the project, will not be paid for separately, but shall be considered to be included in the bid price for the individual Contract items.



2
5 SITE ACCESS MAP

NOTE: CONTRACTOR TO FURNISH AND PLACE 5 CY OF CLASS II SAND FOR TURTLE NESTING SITE. LOCATION TO BE FIELD VERIFIED WITH SITE ENGINEER.

TREE LIST

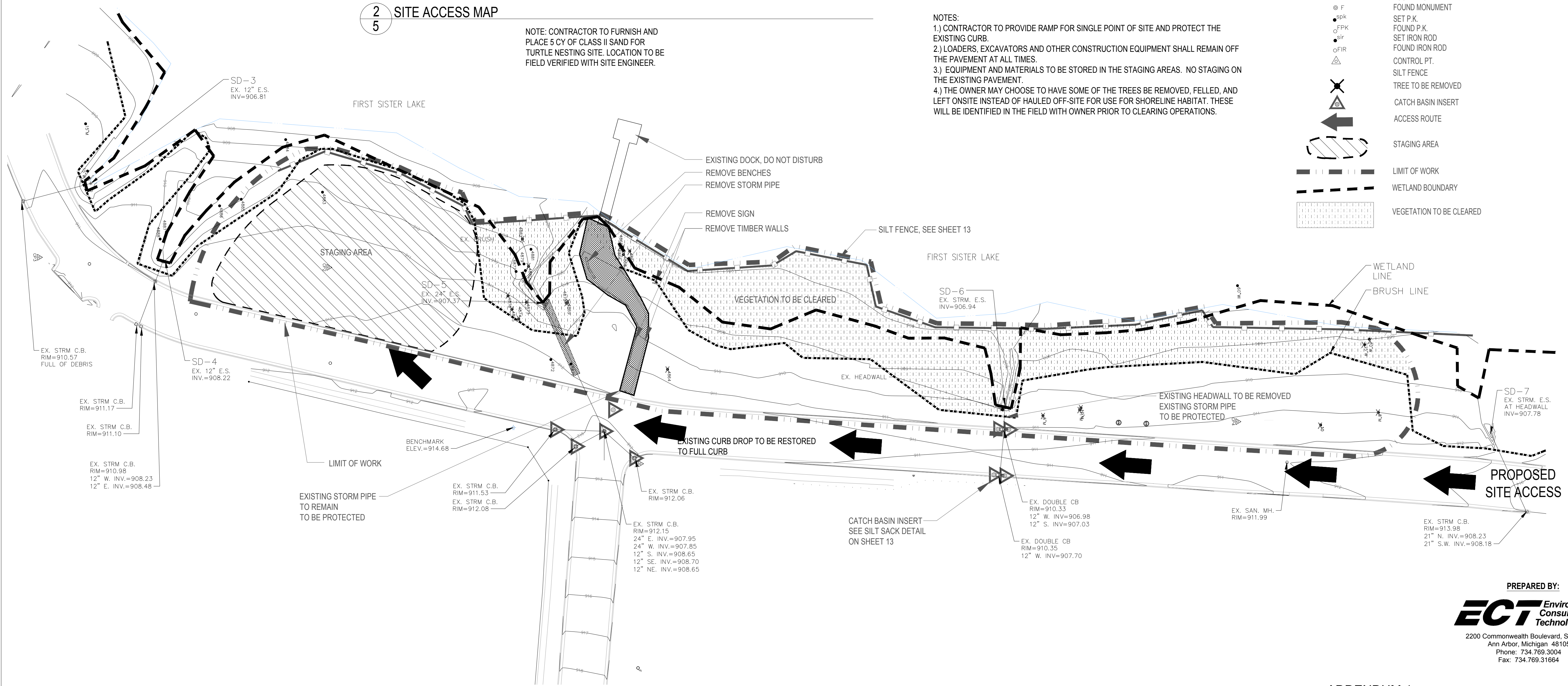
TAG#	DBH	COMMON NAME	GENUS/SPECIES	STEMS	SCORE	LM	INV	REMOVE
4864	6	Hawthorn	Crataegus	4	22	X		X
4865	13	White willow	Salix alba				X	
4866	15	White willow	Salix alba				X	
4867	17	White willow	Salix alba				X	
4868	16	White willow	Salix alba				X	
4869	19	Box Elder	Acer negundo	19	X			X
4870	10	Box Elder	Acer negundo					X
4871	13	Blue Spruce	Picea pungens					X
4872	11	White Spruce	Picea glauca					X
4873	11	Silver Maple	Acer saccharinum					X
4874	11	Black Walnut	Juglans nigra					X
4875	13	American Elm	Ulmus americana					X
4876	8	American Elm	Ulmus americana					X
4877	31	Cottonwood	Populus deltoides	21	X			
4878	22	Cottonwood	Populus deltoides					
4879	20	Cottonwood	Populus deltoides					
4880	7	American Elm	Ulmus americana					X
4881	23	White willow	Salix alba				X	
4882	10	American Elm	Ulmus americana					X
4883	10	Black Tupelo	Nyssa sylvatica					
4884	12	Silver Maple	Acer saccharinum					
4885	11	Black Walnut	Juglans nigra					
4886	13	Black Walnut	Juglans nigra					
4887	44	Cottonwood	Populus deltoides	21	X			
4888	14	Silver Maple	Acer saccharinum					

NOTE: CLEARING LIMITS AND TREE REMOVALS SHOWN ON PLAN. NOT ALL TREES WITHIN CLEARING LIMITS ARE IN THE TREE LIST. CONTRACTOR TO VERIFY CLEARING REQUIREMENTS PRIOR TO CONSTRUCTION.

- NOTES:
- 1.) CONTRACTOR TO PROVIDE RAMP FOR SINGLE POINT OF SITE AND PROTECT THE EXISTING CURB.
 - 2.) LOADERS, EXCAVATORS AND OTHER CONSTRUCTION EQUIPMENT SHALL REMAIN OFF THE PAVEMENT AT ALL TIMES.
 - 3.) EQUIPMENT AND MATERIALS TO BE STORED IN THE STAGING AREAS. NO STAGING ON THE EXISTING PAVEMENT.
 - 4.) THE OWNER MAY CHOOSE TO HAVE SOME OF THE TREES BE REMOVED, FELLED, AND LEFT ONSITE INSTEAD OF HAULED OFF-SITE FOR USE FOR SHORELINE HABITAT. THESE WILL BE IDENTIFIED IN THE FIELD WITH OWNER PRIOR TO CLEARING OPERATIONS.

LEGEND

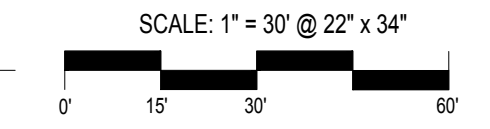
- 8.38 EXIST. CONTOUR
- ×836.2 EXIST. SPOT ELEVATION
- t EXIST. TELEPHONE LINE
- e EXIST. ELECTRIC LINE
- g EXIST. GAS LINE
- g EXIST. GAS VALVE
- f.o. EXIST. FIBER OPTIC LINE
- w EXIST. WATER MAIN
- h EXIST. HYDRANT
- g EXIST. GATE VALVE IN BOX
- g EXIST. GATE VALVE IN WELL
- r EXIST. STORM SEWER
- EXIST. CATCH BASIN OR INLET
- EXIST. BEEHIVE INLET
-) END SECTION
- HEAD WALL
- CULVERT
- EXIST. SANITARY SEWER
- C/L OF DITCH
- ⊙ WELL
- FENCE
- SINGLE TREE
- TREE OR BRUSH LIMIT
- F MANHOLE
- ⊙ F FOUND IRON PIPE
- ⊙ F FOUND MONUMENT
- spk SET P.K.
- FPK FOUND P.K.
- sir SET IRON ROD
- FIR FOUND IRON ROD
- △ CONTROL PT.
- △ SILT FENCE
- △ TREE TO BE REMOVED
- △ CATCH BASIN INSERT
- ACCESS ROUTE
- ▨ STAGING AREA
- LIMIT OF WORK
- WETLAND BOUNDARY
- ▨ VEGETATION TO BE CLEARED



1
5 SITE PREPARATION PLAN

ADDENDUM 1

PREPARED BY:
ECT Environmental Consulting & Technology, Inc.
 2200 Commonwealth Boulevard, Suite 300
 Ann Arbor, Michigan 48105
 Phone: 734.769.3004
 Fax: 734.769.31664



REV.	DATE	DESCRIPTION
1	12-2017	REVISED FOR BID
	11-16-2017	DATE
		DESCRIPTION

CITY OF ANN ARBOR
 PUBLIC SERVICES
 301 EAST HURON STREET
 ANN ARBOR, MI 48106-1007
 ANN ARBOR: 734.769.4410
 WWW.A2gov.ORG

ENGINEERING - PUBLIC SERVICES - CITY OF ANN ARBOR

SITE PREPARATION PLAN

SCALE AS SHOWN

DRAWING No.

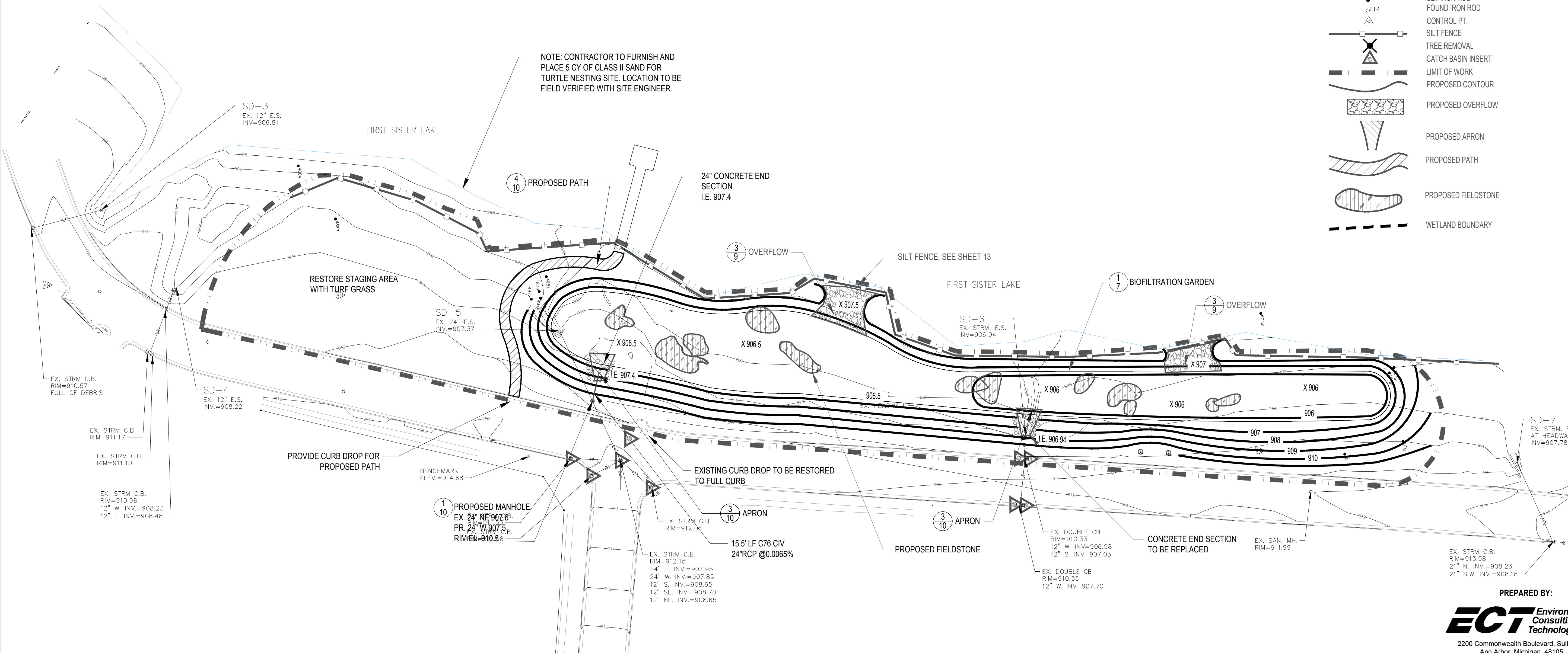
SHEET No.

5 OF 13

NOTE: SEE SHEET 8 FOR REVEGETATION PLAN

LEGEND

- 8.38 EXIST. CONTOUR
- x8.36.2 EXIST. SPOT ELEVATION
- t EXIST. TELEPHONE LINE
- e EXIST. ELECTRIC LINE
- g EXIST. GAS LINE
- g EXIST. GAS VALVE
- f.o. EXIST. FIBER OPTIC LINE
- w EXIST. WATER MAIN
- EXIST. HYDRANT
- EXIST. GATE VALVE IN BOX
- EXIST. GATE VALVE IN WELL
- r EXIST. STORM SEWER
- EXIST. CATCH BASIN OR INLET
- EXIST. BEEHIVE INLET
- END SECTION
- HEAD WALL
- CULVERT
- EXIST. SANITARY SEWER
- CL OF DITCH
- WELL
- FENCE
- SINGLE TREE
- TREE OR BRUSH LIMIT
- MANHOLE
- FOUND IRON PIPE
- FOUND MONUMENT
- SET P.K.
- FOUND P.K.
- SET IRON ROD
- FOUND IRON ROD
- CONTROL PT.
- SILT FENCE
- TREE REMOVAL
- CATCH BASIN INSERT
- LIMIT OF WORK
- PROPOSED CONTOUR
- PROPOSED OVERFLOW
- PROPOSED APRON
- PROPOSED PATH
- PROPOSED FIELDSTONE
- WETLAND BOUNDARY



NOTE: CONTRACTOR TO FURNISH AND PLACE 5 CY OF CLASS II SAND FOR TURTLE NESTING SITE. LOCATION TO BE FIELD VERIFIED WITH SITE ENGINEER.

PREPARED BY:
ECT Environmental Consulting & Technology, Inc.
 2200 Commonwealth Boulevard, Suite 300
 Ann Arbor, Michigan 48105
 Phone: 734.769.3004
 Fax: 734.769.31664

ADDENDUM 1

1 PROPOSED PLAN
 6

Know what's below.
Call before you dig.

REV.	DATE	DESCRIPTION
1	11-16-2017	FOR BID
	12-7-2017	REVISED

CITY OF ANN ARBOR
 PUBLIC SERVICES
 301 EAST HURON STREET
 ANN ARBOR, MI 48107-8647
 ANN ARBOR
 734-794-4410
 www.a2gov.org

ENGINEERING - PUBLIC SERVICES - CITY OF ANN ARBOR

SCALE: 1" = 30' @ 22"x34"

DRAWING No.

PROPOSED PLAN

SHEET No.

6 OF 13

PLUG LIST

Symbol	Scientific Name	Common Name	Wetness Coefficient	Michigan Wetland Category	Coefficient of Conservatism
Forbs					
Ai	<i>Asclepias incarnata</i>	Swamp milkweed	-5	OBL	6
Ep	<i>Eupatorium perfoliatum</i>	Boneset	-4	FACW+	4
Em	<i>Eutrochium maculatum</i>	Joe-pye weed	-5	[OBL]	4
Iv	<i>Iris versicolor</i>	Blue flag iris	-5	OBL	5
Rc	<i>Rosa carolina</i>	Pasture Rose	1	FACU-	4
Rf	<i>Rudbeckia fulgida</i>	Black-eyed Susan	-5	[OBL]	9
To	<i>Tradescantia ohiensis</i>	Spiderwort	2	FACU+	5
Vh	<i>Verbena hastata</i>	Blue vervain	-4	FACW+	4
Vm	<i>Vernonia missurcia</i>	Missouri ironweed	-1	FAC+	4
Grasses					
Cv	<i>Carex vulpinoidea</i>	Fox Sedge	-5	OBL	1
Lo	<i>Leersia oryzoides</i>	Cut grass	-5	OBL	3

SHRUB LIST

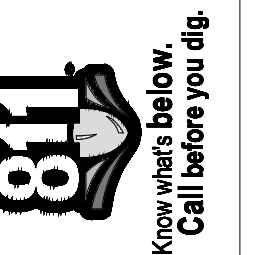
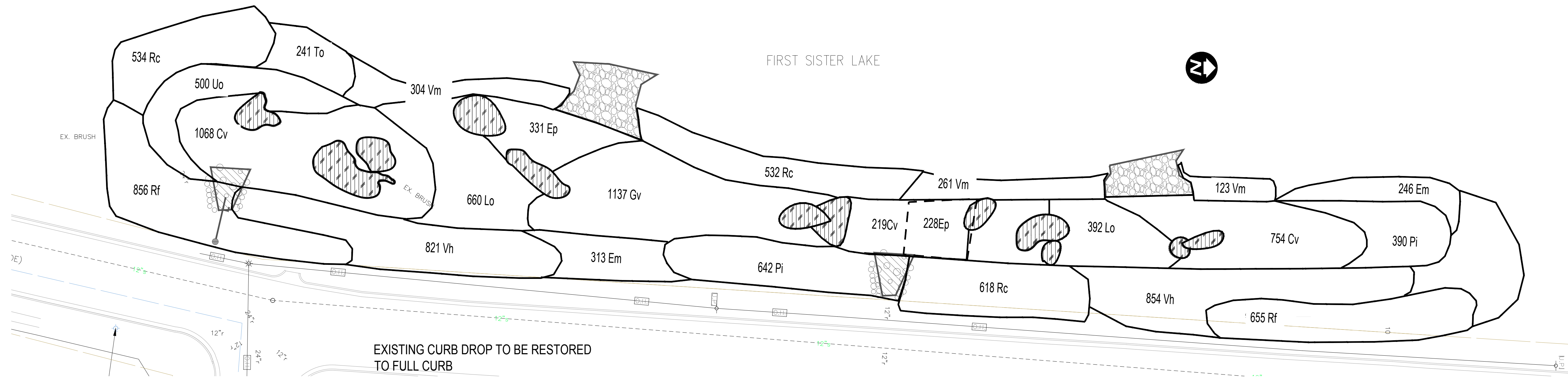
SYM	QTY	SCIENTIFIC NAME	COMMON NAME	SIZE	CONT.
CS	10	CORNUS SERICEA	RED OSIER DOGWOOD	36" HT.	3 GAL.
RA	10	RHUS AROMATICA 'GRO-LOW'	GRO LOW SUMAC	36" HT.	3 GAL.
SA	5	SPIREA ALBA	MEADOWSWEET	36" HT.	3 GAL.

SEED MIX		
SCIENTIFIC NAME	COMMON NAME	LBS/AC
ANDROPOGON GERARDII	BIG BLUESTEM	5.000
ANDROPOGON SCOPARIUS	LITTLE BLUESTEM	7.000
BOUTELOUA CURTIPENDULA	SIDEOATS GRAMMA	5.000
ELYMUS CANADENSIS	CANADA WILD RYE	8.000
ELYMUS VIRGINICUS	VIRGINIA WILD RYE	8.000
GLYCERIA STRIATA	FOWL MANNA GRASS	1.000
PANICUM VIRGATUM	SWITCH GRASS	2.000
SORGHASTRUM NUTANS	INDIAN GRASS	10.00
SPARTINA PECTINATA	PRAIRIE CORD GRASS	0.500
SPOROBOLUS HETEROLEPIS	DROPSEED	0.500
AVENA SATIVA	SEED OATS	20.00
LOLIUM MULTIFLORUM	ANNUAL RYE	5.000
TOTAL		72.00

NOTE: SEED MIX TO BE PLACED NEAR GARDEN EDGES AND UP THE GARDEN SLOPES AS DIRECTED BY THE LANDSCAPE ARCHITECT

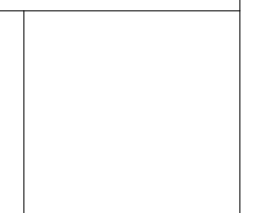
LEGEND

8.38	EXIST. CONTOUR
x836.2	EXIST. SPOT ELEVATION
t	EXIST. TELEPHONE LINE
e	EXIST. ELECTRIC LINE
g	EXIST. GAS LINE
g	EXIST. GAS VALVE
f.o.	EXIST. FIBER OPTIC LINE
w	EXIST. WATER MAIN
h	EXIST. HYDRANT
g	EXIST. GATE VALVE IN BOX
g	EXIST. GATE VALVE IN WELL
r	EXIST. STORM SEWER
o	EXIST. CATCH BASIN OR INLET
o	EXIST. BEEHIVE INLET
o	END SECTION
o	HEAD WALL
o	CULVERT
s	EXIST. SANITARY SEWER
o	C/L OF DITCH
o	WELL
o	FENCE
o	SINGLE TREE
o	TREE OR BRUSH LIMIT
o	MANHOLE
o	FOUND IRON PIPE
o	FOUND MONUMENT
o	SET P.K.
o	FOUND P.K.
o	SET IRON ROD
o	FOUND IRON ROD
o	CONTROL PT.
o	SILT FENCE
o	TREE REMOVAL
o	CATCH BASIN INSERT
o	ACCESS ROUTE
o	WETLAND BOUNDARY



REVISED	FOR BID	DATE	DESCRIPTION
1			

CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48106
734.769.3004
www.a3gov.org



ENGINEERING - PUBLIC SERVICES - CITY OF ANN ARBOR
REVEGETATION PLAN

SCALE: 1" = 20' @ 22" x 34"
DRAWING No. 8 OF 13

PREPARED BY:
ECT Environmental Consulting & Technology, Inc.
2200 Commonwealth Boulevard, Suite 300
Ann Arbor, Michigan 48105
Phone: 734.769.3004
Fax: 734.769.31664

ADDENDUM 1