

LAKE COUNTY DRAINAGE BOARD

2293 NORTH MAIN STREET – CROWN POINT, INDIANA 46307

Telephone 219-755-3745 Fax 219-755-3750

Drainage Board

Commissioner Michael C. Repay, Chairman
Commissioner Kyle W. Allen, Sr., Member
Commissioner Jerry Tippy, Member
Peter Katic, Drainage Board Attorney

Technical Support

Bill Emerson, Jr., P.E. County Surveyor
Daniel V. Gossman, Drainage Administrator
Chris Brown, Asst. Drainage Admin.
Clifford Duggan, MS4 Coordinator
Thomas T. Burke, Jr., PhD, PE, CBBEL, Consultant

Receipt For Bid Packet, Plans & Specifications PROJECT:

2024 Hart Ditch Stabilization
Between Fran-Lin and 45th Avenue,
Munster, North Township, Lake County Indiana

Company Name: **Austgen Equipment, Inc.**

Address: **812 W. 181st Avenue**

City/Town: **Lowell, IN** Zip: **46356**

Phone: **219-213-2389** Fax: **219-779-9623**

Date: **November 21, 2023** E-Mail: **dave@austgenequipment.com**

PRE-BID CONFERENCE DATE: **9:00 A.M.** **Tuesday 28th day of November 2023**

Bids due no later than **9:00 A.M. WEDNESDAY**, the **13th** day of **December 2023**

Attach Business Card _____

Signature of Person Picking Up Plans

Dave Austgen

Printed Name

NOTE: 1 COPY PER COMPANY

DRAINAGE BOARD BID PACKET

CHECKLIST

- 1. BID FORM #95**
- 2. BID FORM #96**
- 3. INSURANCE STATUTE**
- 4. BOND STATUTE**
- 5. RIGHT-OF-ENTRY STATUTE**
- 6. CONTRACTOR'S LICENSE AFFIDAVIT**
- 7. EQUAL EMPLOYMENT & AFFIRMATIVE ACTION AFFIDAVIT (COUNTY FORM #3)**
- 8. AFFIDAVIT OF PRICE PREFERENCES (COUNTY FORM #4)**
- 9. BIDDER INFORMATION QUESTIONNAIRE (COUNTY FORM #6)**
- 10. RESPONSIBLE BIDDING PRACTICES & SUBMISSION REQUIREMENTS FOR SUBMITTING BIDS**
- 11. CONTRACT (SAMPLE)**
- 12. SPECIFICATIONS**
- 13. PLANS (IF APPLICABLE)**
- 14. BID PROPOSAL FORM**

Dan Gossman

Surveyor's Staff

November 21, 2023

Date

Dave Austgen
Austgen Equipment, Inc

Contractor

November 21, 2023

Date

Bid, Offer or Proposal for Sale or Lease of Materials

(Defined at I.C. 36-1-2-2.5)

(Please type or print)

Date: _____

1. Governmental Unit: _____
2. County: _____
3. Bidder (Firm): _____
- Address: _____
- City/State: _____
4. Telephone Number: _____
5. Agent of Bidder (if applicable): _____

Pursuant to notices given, the undersigned offers bid(s) to _____
(Governmental Unit) in accordance with the following attachment(s) which specify the class or item number or description, quantity, unit, unit price and total amount.

The contract will be awarded by classes or items, in accordance with specifications. Any changes or alterations in the items specified will render such bid void as to that class or item. Bidder promises that he has not offered nor received a less price than the price stated in his bid for the materials included in said bid. Bidder further agrees that he will not withdraw his bid from the office in which it is filed. A certified check or bond shall be filed with each bid if required, and liability for breach shall be enforceable upon the contract, the bond or certified check or both in the case may be.

Signature of Bidder or Agent _____

Bid Offer or Proposal

Attach separate sheet listing each item bid based on specifications published by governing body. Following is an example of the bid format:

Class or Item	Quantity	Unit	Description	Unit Price	Amount

Non-Collusion Affidavit

STATE OF INDIANA

COUNTY OF _____

ss:

The undersigned bidder or agent, being duly sworn on oath, says that he has not, nor has any other member, representative, or agent of the firm, company, corporation or partnership represented by him, entered into any combination, collusion or agreement with any person relative to the price to be bid by anyone at such letting nor to prevent any person from bidding nor to induce anyone to refrain from bidding, and that this bid is made without reference to any other bid and without any agreement, understanding or combination with any other person in reference to such bidding.

He further says that no person or persons, firms, or corporation has, have or will receive directly or indirectly, any rebate, fee, gift, commission or thing of value on account of such sale.

Bidder (Firm) _____

Signature of Bidder or Agent _____

Subscribed and sworn to before me this _____ day of _____, 20_____.

Notary Public _____

My Commission Expires: _____

County of Residence: _____

Acceptance

There now being sufficient unobligated appropriated funds available, the contracting authority of _____
(Governmental Unit) hereby accepts the terms of the attached bid for classes or items numbered _____
and promises to pay the undersigned bidder upon delivery the price quoted for the materials stipulated in said bid.

Contracting Authority Members: _____

Date: _____

Bid of

(Contractor)

(Address)

**For Sale or
Lease of Materials**
(Defined at I.C. 35-1-2-9.5)

Filed _____, 20____

THIS BID ACCEPTED FOR THE FOLLOWING
CLASSES OR ITEMS

this _____ day of _____, 20____

P.O. No. _____

Date _____

IF NO PART OF BID IS ACCEPTED, WRITE
THE WORD "REJECTED" ACROSS FACE



CONTRACTOR'S BID FOR PUBLIC WORK - FORM 96

State Form 52414 (R2 / 2-13) / Form 96 (Revised 2013)
Prescribed by State Board of Accounts

PART I

(To be completed for all bids. Please type or print)

Date (month, day, year): _____

1. Governmental Unit (Owner): _____

2. County : _____

3. Bidder (Firm): _____

Address: _____

City/State/ZIPcode: _____

4. Telephone Number: _____

5. Agent of Bidder (if applicable): _____

Pursuant to notices given, the undersigned offers to furnish labor and/or material necessary to complete the public works project of _____

(Governmental Unit) in accordance with plans and specifications prepared by _____

_____ and dated _____ for the sum of

_____ \$ _____

The undersigned further agrees to furnish a bond or certified check with this bid for an amount specified in the notice of the letting. If alternative bids apply, the undersigned submits a proposal for each in accordance with the notice. Any addendums attached will be specifically referenced at the applicable page.

If additional units of material included in the contract are needed, the cost of units must be the same as that shown in the original contract if accepted by the governmental unit. If the bid is to be awarded on a unit basis, the itemization of the units shall be shown on a separate attachment.

The contractor and his subcontractors, if any, shall not discriminate against or intimidate any employee, or applicant for employment, to be employed in the performance of this contract, with respect to any matter directly or indirectly related to employment because of race, religion, color, sex, national origin or ancestry. Breach of this covenant may be regarded as a material breach of the contract.

CERTIFICATION OF USE OF UNITED STATES STEEL PRODUCTS

(If applicable)

I, the undersigned bidder or agent as a contractor on a public works project, understand my statutory obligation to use steel products made in the United States (I.C. 5-16-8-2). I hereby certify that I and all subcontractors employed by me for this project will use U.S. steel products on this project if awarded. I understand that violations hereunder may result in forfeiture of contractual payments.

ACCEPTANCE

The above bid is accepted this _____ day of _____, _____, subject to the following conditions: _____

Contracting Authority Members:

_____	_____
_____	_____
_____	_____

PART II

(For projects of \$150,000 or more – IC 36-1-12-4)

Governmental Unit: _____

Bidder (Firm) _____

Date (month, day, year): _____

These statements to be submitted under oath by each bidder with and as a part of his bid.
Attach additional pages for each section as needed.

SECTION I EXPERIENCE QUESTIONNAIRE

1. What public works projects has your organization completed for the period of one (1) year prior to the date of the current bid?

Contract Amount	Class of Work	Completion Date	Name and Address of Owner

2. What public works projects are now in process of construction by your organization?

Contract Amount	Class of Work	Expected Completion Date	Name and Address of Owner

3. Have you ever failed to complete any work awarded to you? _____ If so, where and why?

4. List references from private firms for which you have performed work.

SECTION II PLAN AND EQUIPMENT QUESTIONNAIRE

1. Explain your plan or layout for performing proposed work. *(Examples could include a narrative of when you could begin work, complete the project, number of workers, etc. and any other information which you believe would enable the governmental unit to consider your bid.)*

2. Please list the names and addresses of all subcontractors *(i.e. persons or firms outside your own firm who have performed part of the work)* that you have used on public works projects during the past five (5) years along with a brief description of the work done by each subcontractor.

3. If you intend to sublet any portion of the work, state the name and address of each subcontractor, equipment to be used by the subcontractor, and whether you will require a bond. However, if you are unable to currently provide a listing, please understand a listing must be provided prior to contract approval. Until the completion of the proposed project, you are under a continuing obligation to immediately notify the governmental unit in the event that you subsequently determine that you will use a subcontractor on the proposed project.

4. What equipment do you have available to use for the proposed project? Any equipment to be used by subcontractors may also be required to be listed by the governmental unit.

5. Have you entered into contracts or received offers for all materials which substantiate the prices used in preparing your proposal? If not, please explain the rationale used which would corroborate the prices listed.

SECTION III CONTRACTOR'S FINANCIAL STATEMENT

Attachment of bidder's financial statement is mandatory. Any bid submitted without said financial statement as required by statute shall thereby be rendered invalid. The financial statement provided hereunder to the governing body awarding the contract must be specific enough in detail so that said governing body can make a proper determination of the bidder's capability for completing the project if awarded.

SECTION IV CONTRACTOR'S NON – COLLUSION AFFIDAVIT

The undersigned bidder or agent, being duly sworn on oath, says that he has not, nor has any other member, representative, or agent of the firm, company, corporation or partnership represented by him, entered into any combination, collusion or agreement with any person relative to the price to be bid by anyone at such letting nor to prevent any person from bidding nor to include anyone to refrain from bidding, and that this bid is made without reference to any other bid and without any agreement, understanding or combination with any other person in reference to such bidding.

He further says that no person or persons, firms, or corporation has, have or will receive directly or indirectly, any rebate, fee, gift, commission or thing of value on account of such sale.

SECTION V OATH AND AFFIRMATION

I HEREBY AFFIRM UNDER THE PENALTIES FOR PERJURY THAT THE FACTS AND INFORMATION CONTAINED IN THE FOREGOING BID FOR PUBLIC WORKS ARE TRUE AND CORRECT.

Dated at _____ this _____ day of _____, _____

(Name of Organization)

By _____

(Title of Person Signing)

ACKNOWLEDGEMENT

STATE OF _____)
COUNTY OF _____) ss

Before me, a Notary Public, personally appeared the above-named _____ and
swore that the statements contained in the foregoing document are true and correct.

Subscribed and sworn to before me this _____ day of _____, _____.

Notary Public

My Commission Expires: _____

County of Residence: _____

BID OF

(Contractor)

(Address)

FOR

PUBLIC WORKS PROJECTS

OF

Filed _____, _____

Action taken _____

IC 34-13-3-4 Limitation on aggregate liability; punitive damages prohibited

Sec. 4. (a) The combined aggregate liability of all governmental entities and of all public employees, acting within the scope of their employment and not excluded from liability under section 3 of this chapter, does not exceed:

- (1) for injury to or death of one (1) person in any one (1) occurrence:
 - (A) three hundred thousand dollars (\$300,000) for a cause of action that accrues before January 1, 2006;
 - (B) five hundred thousand dollars (\$500,000) for a cause of action that accrues on or after January 1, 2006, and before January 1, 2008; or
 - (C) seven hundred thousand dollars (\$700,000) for a cause of action that accrues on or after January 1, 2008; and
- (2) for injury to or death of all persons in that occurrence, five million dollars (\$5,000,000).

(b) A governmental entity or an employee of a governmental entity acting within the scope of employment is not liable for punitive damages.

[Pre-1998 Recodification Citation: 34-4-16.5-4.]

As added by P.L.1-1998, SEC.8. Amended by P.L.108-2003, SEC.2; P.L.161-2003, SEC.6; P.L.97-2004, SEC.114.

IC 36-9-27-78 Contracts; bidding; required provisions; surety bonds

Sec. 78. (a) Whenever the board is ready to let contracts, it shall publish notice in accordance with [IC 5-3-1](#). The notice must:

- (1) state that at a date, time, and place the board will receive bids on the work;
- (2) generally and concisely describe the nature of the work to be done and materials to be furnished;
- (3) invite sealed bids; and
- (4) state that prospective bidders may obtain plans, specifications, and forms from the county surveyor in charge of the work.

A defect in the form of the notice does not invalidate proceedings under the notice.

(b) Each bidder shall deposit with the bidder's bid, at the bidder's option, either a certified check made payable to the board in the sum of five percent (5%) of the bid or a bid bond in the sum of five percent (5%) of the bid. If a bidder elects to deposit a bid bond, the bond must be payable to the board with sufficient sureties, and the bond must be conditioned upon the bidder's execution of a contract in accordance with the bidder's bid if accepted by the board and must provide for the forfeiture of five percent (5%) of the amount of the bid upon the bidder's failure to do so. The board shall return all checks and bonds submitted by unsuccessful bidders, and shall return a successful bidder's check or bond when the successful bidder enters into a contract with the board.

(c) At the hour specified in the notice for receiving the bids, the board shall open and examine all bids. The board shall then promptly award the contract or contracts to the lowest bidder or bidders it finds to be qualified. In determining whether a bidder is qualified, the board shall consider the complexity and magnitude of the work to be performed, and the skill and experience of the bidder. Within five (5) days after the acceptance of a bid, the successful bidder shall enter into a contract with the board that complies with subsection (d). If a successful bidder fails to enter into such a contract, the successful bidder forfeits to the board, as liquidated damages, the check or bond deposited under subsection (b).

(d) The contract between the board and a successful bidder must provide:

- (1) that the contractor will perform the work under the supervision of the county surveyor and in accordance with the plans, specifications, and profiles adopted by the board;
- (2) that a claim for payment under the contract will not be approved by the board until the work for which the claim is presented has been approved by the county surveyor;
- (3) the time within which the work must be completed;
- (4) that fifteen percent (15%) of the contract price shall be withheld by the board for a period of sixty (60) days after the completion of the work, for the purpose of securing payment of suppliers, laborers, and subcontractors; and
- (5) for other terms that the board considers appropriate.

(e) Upon execution of the contract, the successful bidder shall give to the board a bond payable to the board, in an amount fixed by the board but not less than the amount of the bid, and with a corporate surety licensed to do business in Indiana. The bond must be conditioned on the faithful performance of the contract and the payment of all expenses and damages incurred under the contract, including payment of all suppliers, laborers, and subcontractors. However, in lieu of a corporate surety bond, the board may accept:

- (1) a cash bond;
- (2) a property bond; or
- (3) a bond from a sufficiently financed private bonding company.

[Pre-Local Government Recodification Citations: 19-4-7-5 part; 19-4-7-6; 19-4-7-7 part.]

As added by Acts 1981, P.L.309, SEC.101. Amended by Acts 1981, P.L.45, SEC.82; Acts 1981, P.L.317, SEC.27; P.L.350-1983, SEC.3; P.L.127-2017, SEC.359.

IC 36-9-27-79.1 Contracts estimated to be not more than \$150,000; procedure

Sec. 79.1. Notwithstanding sections 77 and 78 of this chapter, the following provisions apply whenever the board estimates that the amount of the contracts to be let is not more than one hundred fifty thousand dollars (\$150,000):

- (1) The board need not advertise in the manner provided by section 78 of this chapter. If the board does not advertise, it shall mail or send by electronic means written invitations for bids to at least three (3) persons believed to be interested in bidding on the work. The invitations shall be mailed or sent by electronic means at least seven (7) days before the date the board will receive bids, and must state the nature of the contracts to be let and the date, time, and place bids will be received.
- (2) The board may authorize the county surveyor to contract for the work in the name of the board.

(3) The contracts may be for a stated sum or may be for a variable sum based on per unit prices or on the hiring of labor and the purchase of material.

(4) The contracts shall be let in accordance with the statutes governing public purchase, including [IC 5-22](#).

(5) The board may for good cause waive any requirement for the furnishing by the bidder of a bid bond or surety and the furnishing by a successful bidder of a performance bond.

[Pre-Local Government Recodification Citations: 36-9-27-79 part; Part new.]

As added by Acts 1981, P.L.57, SEC.42. Amended by P.L.355-1987, SEC.1; P.L.49-1997, SEC.84; P.L.241-1999, SEC.6; P.L.43-2019, SEC.4; P.L.164-2019, SEC.8.



Office of the Lake County Surveyor

Lake County Government Center • 2293 North Main Street • Crown Point, Indiana 46307
Phone: (219) 755-3745 • Fax: (219) 755-3750

Bill Emerson, Jr., P.E.
County Surveyor

IC 36-9-27-33

Right of entry over private land; extension of spoil banks beyond right-of-way

Sec. 33. (a) The county surveyor, the board, or an authorized representative of the surveyor or the board acting under this chapter has the right of entry over and upon land lying within seventy-five (75) feet of any regulated drain. The seventy-five (75) foot limit shall be measured at right angles to:

- (1) the center line of any tiled drain; and
 - (2) the top edge of each bank of an open drain;
- as determined by the surveyor.

(b) Spoil bank spreading resulting from the construction, reconstruction, or maintenance of an open drain may extend beyond the seventy-five (75) foot right-of-way if:

- (1) the county surveyor finds that the extension is necessary;
- and
- (2) the extension has been provided for in the engineer's report on the construction, reconstruction, or maintenance.

(c) All persons exercising the right given by this section shall, to the extent possible, use due care to avoid damage to crops, fences, buildings, and other structures outside of the right-of-way, and to crops and approved structures inside the right-of-way. The county surveyor shall give oral or written notice of the entry on the land to the property owner of record, and in the case of a municipality, to the executive of that municipality. The notice must state the purpose for the entry.

(d) The owners of land over which the right-of-way runs may use the land in any manner consistent with this chapter and the proper operation of the drain. Permanent structures may not be placed on any right-of-way without the written consent of the board. Temporary structures may be placed upon or over the right-of-way without the written consent of the board, but shall be removed immediately by the owner when so ordered by the board or by the county surveyor. Crops grown on a right-of-way are at the risk of the owner, and, if necessary in the reconstruction or maintenance of the drain, may be damaged without liability on the part of the surveyor, the board, or their representatives. Trees, shrubs, and woody vegetation may not be planted in the right-of-way without the written consent of the board, and trees and shrubs may be removed by the surveyor if necessary to the proper operation or maintenance of the drain.

(e) This subsection applies to new regulated drains established after September 1, 1984, and to urban drains. Except as provided in subsection (f), the board may reduce the seventy-five (75) foot right-of-way requirement of subsections (a) and (b) to any distance of not less than:

- (1) twenty-five (25) feet from the top of each bank of an open ditch; and
 - (2) fifteen (15) feet from the center line of any tiled drain;
- as measured at right angles.

(f) This subsection applies only to a platted subdivision. Upon the recommendation of the county surveyor, the board may further reduce the right-of-way for any tiled drain, including a tiled urban drain that was reduced under subsection (e)(2). However, the board shall not make a reduction that results in a right-of-way that is:

- (1) less than seven (7) feet from each side of the center line as measured at right angles; or
- (2) less than the recommendation made by the county surveyor.

(g) A reduction of a right-of-way under subsection (e) or (f) does not:

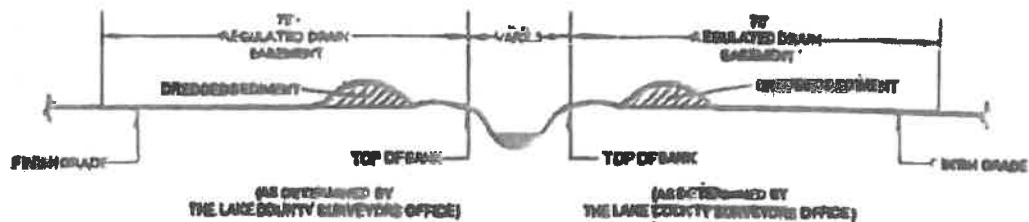
- (1) affect a public utility's use of; or
- (2) deprive a public utility of the use of;

the right-of-way if, at the time the right-of-way is reduced, the public utility is occupying and using the right-of-way for the location of the public utility's structures, including pipelines, electric lines, or any related structures.

(h) The surveyor, the board, or an authorized representative of the surveyor or the board acting under this chapter does not commit criminal trespass under IC 35-43-2-2.

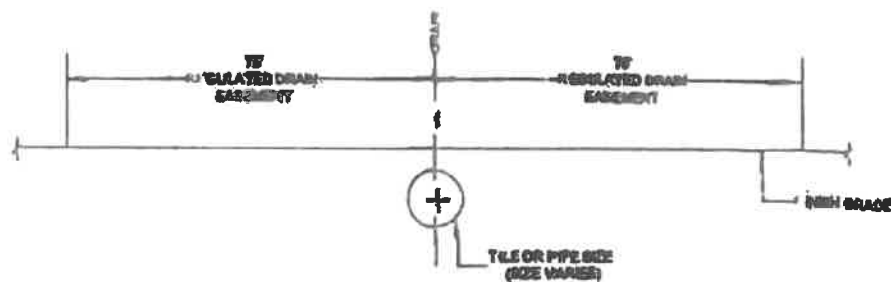
PREPARED BY:
The Office of Lake County Surveyor

**ILLUSTRATION OF REGULATED
DRAIN EASEMENTS**



**- SECTION -
TYPICAL OPEN DRAIN**

NTS



**- SECTION -
TYPICAL TILED DRAIN**

NTS

AFFIDAVIT

THIS IS TO ACKNOWLEDGE THAT _____
OF _____ HAS A VALID LAKE COUNTY
GENERAL CONTRACTOR'S LICENSE.

SIGNED:

COMPANY NAME

SIGNATURE

STATE OF INDIANA)
) SS
COUNTY OF _____)

SUBSCRIBED AND SWORN TO BEFORE ME, A NOTARY PUBLIC IN
AND FOR SAID COUNTY, THIS _____ DAY OF _____,
20____.

NOTARY PUBLIC

MY COMMISSION EXPIRES:

A F F I D A V I T

OF EQUAL EMPLOYMENT AND AFFIRMATIVE ACTION

THIS IS TO ACKNOWLEDGE, THAT _____
OF _____

1. HAS ADOPTED A POLICY OF EQUAL EMPLOYMENT AND AFFIRMATIVE ACTION IN ALL ASPECTS OF EMPLOYMENT;
2. DOES NOT IN ITS HIRING, ADVANCEMENT, PROMOTION, OR ANY OTHER CONDITION OF EMPLOYMENT DISCRIMINATE BY REASON OF AGE, MILITARY SERVICE, RACE, RELIGION, COLOR, PHYSICAL HANDICAP, POLITICAL AFFILIATION, SEX, NATIONAL ORIGIN, OR ANCESTRY.
3. CERTIFIES THAT ITS AFFIRMATIVE ACTION AND EQUAL EMPLOYMENT PROGRAM IS CURRENT AND IN COMPLIANCE WITH ALL APPLICABLE FEDERAL/STATE/LOCAL LAWS AND INTERPRETATIVE COURT DECISIONS.
4. ACKNOWLEDGES THAT IF AWARDED THE BID, BREACH OF ANY FEDERAL/STATE/LOCAL EQUAL EMPLOYMENT OR AFFIRMATIVE ACTION PROVISION OF THE UNITED STATES OF AMERICA, THE STATE OF INDIANA, OR THE COUNTY OF LAKE MAY BE REGARDED AS A MATERIAL BREACH OF THE CONTRACT.
5. AGREES TO PROVIDE TO THE COUNTY OF LAKE A COPY OF ITS EQUAL EMPLOYMENT OPPORTUNITY AND AFFIRMATIVE ACTION PROGRAM WITHIN TEN (10) DAYS OF RECEIPT OF A WRITTEN REQUEST.
6. AGREES TO SUBMIT TO THE COUNTY OF LAKE, AFFIRMATIVE ACTION OFFICER, UPON REQUEST AND PRIOR TO AWARDED OF THE BID WRITTEN INFORMATION REGARDING THE MINORITY OWNERSHIP OF THE COMPANY.

SIGNED:

COMPANY NAME

COMPANY REPRESENTATIVE SIGNATURE

SUBSCRIBED AND SWORN TO BEFORE ME, A NOTARY PUBLIC IN AND FOR SAID COUNTY AND STATE,

THIS _____ DAY OF _____ 20 ____.

NOTARY PUBLIC

MY COMMISSION EXPIRES: _____

RESIDENT OF _____ COUNTY

AFFIDAVIT OF PRICE PREFERENCE

I. LOCAL BUSINESS PRICE PREFERENCE

A. This vendor qualifies for the local business preference under IC 5-22-15-20.9 because (please indicate with an "X").

_____ The principle place of business is in Lake, Porter, Newton, or Jasper County.

_____ The majority of the businesses payroll is paid to residents of Lake, Porter, Newton, or Jasper County.

_____ The majority of the businesses employees reside in Lake, Porter, Newton, or Jasper County.

B. The Vendor claims the following local business price preference based on the vendor's total bid (please indicate with an "X").

_____ Five 5% percent on the total bid with is less than \$50,000.00.

_____ Three 3% percent on the total bid which between \$50,000 but less than \$100,000.

_____ One 1% percent on the bid which is \$100,000 or more.

II. CRITERIA FOR AN INDIANA SMALL BUSINESS

A. This vendor is an Indiana small business as defined in IC 5-22-14-1 because the vendor (please indicate with an "X").

_____ Is independently owned and operated, and

_____ Is not dominant in its field of operation.

B. This vendor meets both of the criteria in II. A. above and also meets the following criteria (vendor may select only one of the following by placing an "X").

_____ Is a wholesale business with annual sales in the most recent fiscal year less than \$4,000,000.

_____ Is a construction business with average annual receipts for the preceding three fiscal years less than \$4,000,000.

_____ Is a retail business or a business selling services with annual sales and receipts less than \$500,000.

_____ Is a manufacturing business with less than 100 employees.

III. PRODUCT COMPOSITION PRICE PREFERENCES

- A. A vendor can claim this preference only if the vendor has not claimed the Indiana small business preference in II above.
- B. Product composition price preference (vendor may select only one of the following by placing an "X").
- ☐ Ten 10% percent under IC 5-22-15-16 for recycled materials.
 - ☐ Ten 10% percent under IC 5-22-15-18 for soy bean oil based ink.
 - ☐ Twenty 20% percent under IC 5-22-15-19 for soy fuel.
 - ☐ Ten 10% percent under IC 5-22-15-23.5 for Indiana farm produce.
 - ☐ Ten 10% percent under IC 5-22-15-20.7 for indoor air quality inspections and evaluations.

SIGNED:

COMPANY NAME

COMPANY REPRESENTATIVE SIGNATURE

SUBSCRIBED AND SWORN TO BEFORE ME, A NOTARY PUBLIC IN AND FOR SAID
COUNTY AND STATE, THIS _____ DAY OF _____ 20 _____,

NOTARY PUBLIC

MY COMMISSION EXPIRES: _____

RESIDENT OF _____ COUNTY

BIDDER INFORMATION QUESTIONNAIRE

TO BE COMPLETED BY THE BIDDER AND RETURNED WITH THE BID PACKET. TO BE TYPEWRITTEN OR PRINTED ONLY.

PLACE A CHECK MARK BY THE ONE THAT APPLIES TO YOUR COMPANY:

- | | | | |
|------------------------|-------|----------------------------------|-------|
| A) SOLE PROPRIETORSHIP | _____ | D) LIMITED LIABILITY CORPORATION | _____ |
| B) PARTNERSHIP | _____ | E) LIMITED LIABILITY PARTNERSHIP | _____ |
| C) CORPORATION | _____ | F) OTHER (PLEASE EXPLAIN) | _____ |

IF YOUR COMPANY IS A CORPORATION PLEASE INDICATE BELOW THE COMPANY NAME AND ADDRESS AS IT APPEARS WITH THE INDIANA SECRETARY OF STATE'S OFFICE, CORPORATIONS DIVISION.

COMPANY NAME

ADDRESS

ADDRESS

CITY, STATE AND ZIP CODE

INDICATE BELOW THE COMPANY ADDRESS WHERE YOU WOULD LIKE ORDERS DIRECTED:

COMPANY NAME

ADDRESS

ADDRESS

CITY, STATE AND ZIP CODE

INDICATE BELOW THE COMPANY ADDRESS WHERE YOU WOULD LIKE PAYMENT REMITTED

COMPANY NAME

ADDRESS

ADDRESS

CITY, STATE AND ZIP CODE

INDICATE BELOW THE NAME OF THE REPRESENTATIVE OR REPRESENTATIVES FROM YOUR COMPANY THAT THE COUNTY OF LAKE SHOULD CONTACT DURING THE COURSE OF THIS BID TO PLACE ORDERS, SEEK INFORMATION, ETC., ALSO INDICATE THEIR TELEPHONE NUMBER(S) AND FAX NUMBER(S).

COMPANY REPRESENTATIVE NAME

TELEPHONE NUMBER

FAX NUMBER

COMPANY REPRESENTATIVE NAME

TELEPHONE NUMBER

FAX NUMBER

**REQUIRED PREQUALIFICATION FOR ANY
BID FOR PUBLIC CONSTRUCTION SUBMITTED TO
LAKE COUNTY, INDIANA**

On December 8, 2015, the Lake County Council adopted Ordinance Number 1391B which required that contractors proposing to submit a bid on any County of Lake project estimated to costs more than \$150,000 must prequalify.

Any contractor submitting a bid for a bid opening date after June 1, 2016 must comply with this Ordinance. Note that compliance must occur prior to receipt of a bid and prequalification will last for one (1) year.

Listed below are the requirements as stated in the County Council Ordinance. Any party seeking to prequalify must submit the information listed in Section 1, Paragraphs A-L to President of the Lake County Board of Commissioners. The Ordinance is as follows:

SECTION 1. This Ordinance which is entitled "Responsible Bidding Practices and Submission Requirements for Submitting Bids to Perform Construction Work on Public Works Projects in Lake County, Indiana." is hereby enacted and shall read as follows:

1. Bid Submission Requirements

Contractors proposing to submit bids on any County of Lake ("County") project estimated to be at least One Hundred Fifty Thousand Dollars (\$150,000.00) or more must, prior to the opening of bids, submit a statement made under oath and subject to perjury laws, on a form designated by the County and must include:

- A.** A copy of a print-out of the Indiana Secretary of State's on-line records for the bidder dated within sixty (60) days of the submission of said document showing that the bidder is in existence, current with the Indiana Secretary of State's Business Entity Reports, and eligible for a certificate of good standing. If the bidder is an individual, sole proprietor or partnership, this subsection shall not apply;
- B.** A list identifying all former business names;
- C.** Any determination by a court or governmental agency for violation of federal, state or local laws, including but not limited to violation of contracting or antitrust laws, tax or licensing laws, environmental laws, the Occupational Safety and Health Act (OSHA), or federal Davis-Bacon and related Acts;
- D.** A statement on staffing capabilities, including labor sources;
- E.** Evidence of participation in apprenticeship and training programs, applicable to the work to be performed on the project, which are approved by and registered with the United States Department of Labor's Office of Apprenticeship, or its successor organization. The required evidence includes a copy of all applicable apprenticeship certificates or standards for these training programs;

- F. A copy of a written plan for employee drug testing that: (1) covers all employees of the bidder who will perform work on the public work project; and (2) meets, or exceeds, the requirements set forth in I.C. 4-13-18-5 or I.C. 4-13-18-6;
- G. The name and description of the management experience of each of the bidder's project managers and superintendents that bidder intends to assign to work on the project;
- H. Proof of any professional or trade license required by law for any trade or specialty area in which bidder is seeking a contract award; and disclosure of any suspension or revocation within the previous five years of any professional or trade license held by the company, or of any director, officer or manager employed by the bidder;
- I. Evidence that the contract is utilizing a surety company which is on the United States Department of Treasury's Listing of Approved Sureties; and
- J. A written statement of any federal, state or local tax liens or tax delinquencies owed to any federal, state or local taxing body in the last five years;
- K. A statement that individuals who will perform work on the public work project on behalf of the bidder will be properly classified as either (1) an employee or (2) an independent contractor, under all applicable state and federal laws and local ordinances;
- L. A list of projects of similar size and scope of work that the bidder has performed in the State of Indiana within three (3) years prior to the date on which the bid is due.

The County reserves the right to demand supplemental information from the bidder. (additional) verification any of the information provided by the bidder, and may also conduct random inquiries of the bidder's current and prior customers.

II. Part B: Bid Submittal from Subcontractors.

All bidders shall provide a written list that discloses the name, address, and type of work for each first-tier subcontractor from whom the bidder has accepted a bid and/or intends to hire on any part of the public work project, including individuals performing work as independent contractors, within five (5) business days after the date the bids are due.

In addition, each such first-tier subcontractor shall be required to adhere to the requirements of Section I of this Ordinance as though it were bidding directly to the County, except that first-tier subcontractors shall submit the required information (including the name, address, and type of work for each of their first-tier subcontractors) to the successful bidder no later than five (5) business days after the subcontractor's first day of work on the public work project and the bidder shall then forward said information to the County. Payment shall be withheld from any first-tier subcontractor who fails to timely submit said information until such information is submitted and approved by the County.

Upon request, the County may require any second and lower-tier subcontractors to provide the required information (including name, address, type of work on the project and the name of the higher-tier subcontractor). Payments shall be withheld from any second or lower-tier contractor

fail to timely submit this information until this information is submitted and approved by the County. Additionally, the County may require the successful bidder and relevant subcontractor to remove the second or lower tier subcontractor from the project and replace it with a responsive and responsible subcontractor.

Failure of a subcontractor to submit the required information shall not disqualify the successful bidder from performing work on the project and shall not constitute a contractual default and/or breach by the successful bidder. However, the County May withhold all payments otherwise due for work performed by a subcontractor, until the subcontractor submits the required information and the County approves such information. The County may also require that successful bidder to remove the subcontractor from the project and replace it with a responsive and responsible subcontractor.

The disclosure of a subcontractor ("Disclosed Subcontractor") by a bidder or a subcontractor shall not create any rights in the Disclosed Subcontractor. Thus, a bidder and/or subcontractor may substitute another subcontractor ("Substitute Subcontractor") for a Disclosed Subcontractor by giving the County written notice of the name, address, and type of work of the Substitute Subcontractor. The Substitute Subcontractor is subject to all other obligations of a subcontractor under this Ordinance.

III. Validity of Pre Qualification Classification

Upon designation by the County that a contractor's or subcontractor's submission in anticipation of a bid is complete and timely, and upon any further consideration deemed necessary by the contractor or subcontractor may be pre-qualified for future County public works projects. A contractor's classification as "qualified" shall exempt the contractor or subcontractor from the comprehensive submission requirements contained herein for a period of twelve (12) months. Thereafter, contractors or subcontractors who are pre-qualified must submit a complete application for continuation of "pre-qualified" standing, on a form provided by the County, (also referred to as the "short form") by December 31 st for the upcoming calendar year. Failure by any pre-qualified contractor or subcontractor to timely submit its complete application for continuation of "pre-qualified" standing shall result in automatic removal of the designation, effective January 1 of the upcoming year. However, the "removed" contractor or subcontractor shall still be permitted to bid on County public works projects.

Any material changes to the contractor's status, at any time, must be reported in writing within ten (10) days of its occurrence to the County. The pre-qualification designation is solely within the discretion of the County and the County specifically reserves the right to change or revoke the designation for a stated written reason(s).

Denial of pre-qualification shall be in writing and shall be forwarded to the contractor within seven (7) working days of such decision. Any contractor denied or losing pre-qualification status may request reconsideration of the decision by submitting such request in writing to the County within five (5) business days of receipt of notice of denial.

IV. Incomplete Submissions by Bidders

It is the sole responsibility of the potential bidder to comply with all submission requirements applicable to the bidder in Section I above by no later than the public bid opening. Post-bid submissions must be submitted in accordance with Section II above. Submissions deemed inadequate, incomplete, or untimely by the County may result in the automatic disqualification of the bid.

V. Responsive and Responsible Bidder Determination

The County, after review of complete and timely submissions, shall, in its sole discretion, after taking into account all information in the submission requirements, determine whether a bidder is responsive and responsible. The County specifically reserves the right to utilize all information provided in the contractor or subcontractor's submission or any information obtained by the County through its own independent verification of the information provided by the contractor.

VI. Certified Payroll

For projects in which the cost is at least \$250,000, the successful bidder and all subcontractors working on a public work project shall submit a certified payroll report utilizing the federal form now known as a WH-347 which must be prepared on a weekly basis and submitted to the County within ten (10) calendar days after the end of each week in which the bidder or subcontractor performed its work on the public work project. These certified payroll reports shall identify the job title and craft of each employee on the project, e.g., journeyman electrician or apprentice electrician. In the event any contractor or subcontractor uses independent contractors to perform work on the project, such individual must be identified on the WH-347 form with the same information as is required for employees.

The County may withhold payment due for work performed by a bidder if the bidder fails to timely submit its certified payroll reports until such time as such certified payroll reports are submitted. The County may also withhold payment due for work performed by a subcontractor if the subcontractor fails to timely submit its certified payroll reports until such time as such certified payroll reports are submitted. The County shall not withhold payment to a bidder for work performed by the bidder or for work performed by subcontractors who have submitted their certified payroll reports, because one or more other subcontractors failed to timely submit their certified payroll reports.

VII. Public Records

All information submitted by a bidder or a subcontractor pursuant to this Ordinance, including certified payrolls, are public records subject to review pursuant to the Indiana Access to Public Records law (IC 5-14-9).

VIII. Penalties for False, Deceptive, or Fraudulent Statements/Information

Any bidder that willfully makes, or willfully causes, to be made, a false, deceptive or fraudulent statement, or willfully submits false, deceptive or fraudulent information in connection with
of three (3) years.

IX. Conflicting Ordinances

Any ordinance or provision of any ordinance in conflict with the provisions of this Ordinance is hereby repealed.

X. Severability

If any provision of this Ordinance is found to be invalid, the remaining provisions of this Ordinance shall not be affected by such a determination. These other provisions of this Ordinance shall remain in full force and effect without the invalid provision.

Responsible & Responsive Bidder Determination – Public Body Checklist

Project:

Contract Number:

Business Name:

Business Address:

Contact Person:

Phone:

Fax:

E-mail:

-
- A. Indiana Secretary of State online records: Yes ☐ No ☐
- B. List of former business names: N/A ☐ Yes ☐ No ☐
- C. Disclosure of violations of federal/state/local laws: N/A ☐ Yes ☐ No ☐
- D. Description of staffing capabilities, including labor sources: Yes ☐ No ☐
- E. Evidence of participation in applicable apprenticeship programs: Yes ☐ No ☐
- F. Written employee drug testing plan or certification that employee drug testing is established under a collective bargaining agreement: Yes ☐ No ☐
- G. Name & description of project managers and superintendents management experience: Yes ☐ No ☐
- H. Proof of required professional or trade licenses: N/A ☐ Yes ☐ No ☐
- I. Evidence of qualified surety bonding: Yes ☐ No ☐
- J. Disclosure of tax liens or delinquencies in last 5 years: Yes ☐ No ☐
- K. Employee classification statement: Yes ☐ No ☐
- L. List of similar projects completed in last three years: Yes ☐ No ☐
- M. Form A first-tier subcontractor disclosure (if applicable): N/A ☐ Yes ☐ No ☐

Responsible & Responsive Bidder - Contractor Affidavit of Compliance

Prime contractor and its first-tier subcontractors shall complete this Affidavit of Compliance ("Affidavit") and provide supporting documentation as required pursuant to *An Ordinance Establishing Responsible and Responsive Bidder Requirements on Public Works Projects*. Contractor must submit this Affidavit and all related evidence with its bid. Contractor shall be responsible for providing this Affidavit to all first-tier subcontractors who will perform work on the project. All subcontractor Affidavits and supporting documentation must be submitted to the prime contractor no later than five (5) business days after the subcontractor's first day of work on the public work project.

For the remainder of this Affidavit, "Contractor" refers to the prime contractor and its first-tier subcontractors. Each item must be answered. If a question is not applicable, answer "NA." If the answer is none, answer "none."

The certifications set forth in this Affidavit and all documents attached hereto shall become a part of any contract awarded to the Contractor. Furthermore, Contractor shall comply with these certifications during the term and/or performance of the contract.

The undersigned _____, as _____ and on behalf
(Name) (Title)
of _____, having been duly sworn under oath, certifies that:
(Contractor)

Business Organization

The form of business organization of the Contractor is (check one):

☐ Sole Proprietor or Partnership
☐ Corporation

☐ LLC
☐ Independent Contractor (Individual)

Authorization to do business in the State of Indiana:

Yes [] No []

Attach Indiana Secretary of State online records dated within 60 days of bid (if corporation or LLC):

N/A [] Yes [] No []

List all former business names:

Affidavit of Compliance
Contract No. _____

Disclosure of violations of federal or state laws

List any determinations by a court or governmental agency for violations of federal, state or local laws, including but not limited to violations of contracting or antitrust laws, tax or licensing laws, environmental laws, the Occupational Safety and Health Act (OSHA), the National Labor Relations Act (NLRA), or federal Debris-Burn and related Acts.

Date	Law	Determination	Penalty

Staffing capabilities

Provide a statement and description of contractor's staffing capabilities, including labor sources:

Participation in approved apprenticeship program(s)

Contractor participates in apprenticeship training programs applicable to the work to be performed on the project, which are approved by and registered with the United States Department of Labor.

Yes ☐ No ☐

Attach supporting documentation and describe below (e.g. Apprenticeship Standards or applicable provision from multi-employer program documents):

Apprenticeship Standards and Apprenticeship Agreement provided for any apprentice(s) performing work on the project:

N/A ☐ Yes ☐ No ☐

Affidavit of Compliance
Contract No. _____

Responsible & Responsive Bidder – Contractor Affidavit of Compliance

Prime contractor and its first-tier subcontractors shall complete this Affidavit of Compliance ("Affidavit") and provide supporting documentation as required pursuant to *An Ordinance Establishing Responsible and Responsive Bidder Requirements on Public Works Projects*. Contractor must submit this Affidavit and all related evidence with its bid. Contractor shall be responsible for providing this Affidavit to all first-tier subcontractors who will perform work on the project. All subcontractor Affidavits and supporting documentation must be submitted to the prime contractor no later than five (5) business days after the subcontractor's first day of work on the public work project.

For the remainder of this Affidavit, "Contractor" refers to the prime contractor and its first-tier subcontractors. Each item must be answered. If a question is not applicable, answer "NA." If the answer is none, answer "none."

The certifications set forth in this Affidavit and all documents attached hereto shall become a part of any contract awarded to the Contractor. Furthermore, Contractor shall comply with these certifications during the term and/or performance of the contract.

The undersigned _____, as _____ and on behalf
(Name) (Title)
of _____, having been duly sworn under oath, certifies that:
(Contractor)

Business Organization

The form of business organization of the Contractor is (check one):

☐ Sole Proprietor or Partnership
☐ Corporation

☐ LLC
☐ Independent Contractor (Individual)

Authorization to do business in the State of Indiana:

Yes [] No []

Attach Indiana Secretary of State online records
dated within 60 days of bid (if corporation or LLC):

N/A [] Yes [] No []

List all former business names:

Affidavit of Compliance
Contract No. _____

Drug testing

Contractor has a written plan for employee drug testing or Contractor has signed a collective bargaining agreement that establishes an employee drug testing program consistent with Indiana Codes 4-13-18-5 and 4-13-18-6.

Yes ☐ No ☐

Management Experience

Attach a list of the names and description of the management experience of each of the Contractor's project managers and superintendents that Contractor intends to assign to work on the project.

Yes ☐ No ☐

Professional or trade licenses

Contractor will possess all applicable professional and trade licenses required for performing the work.

Yes ☐ No ☐

License	Number	Date Issued	Current Expiration	Holder of License

If any of the above license(s) have been revoked or suspended, state the date and reason for suspension/revocation:

Surety Bond

Contractor is utilizing a surety company which is on the United States Department of Treasury's Listing of Approved Sureties

Yes ☐ No ☐

- Attach supporting documentation

Tax liens or tax delinquencies

Contractor provides disclosure of any federal, state or local tax liens or tax delinquencies against the Contractor or any officers of the Contractor in the last five (5) years

Yes ☐ No ☐

Affidavit of Compliance
Contract No. _____

If "yes," describe lien/delinquencies and resolution: _____

Employee classification statement

Provide a written statement that individuals who will perform work on the public work project on will be properly classified as either an employee or an independent contractor under all applicable state and federal laws and local ordinances: _____

Subcontractor disclosure

Contractor will submit completed Form A to disclose the name, address and type of work for each first-tier subcontractor from whom the Contractor has accepted a bid and/or intends to hire on any part of the project within five (5) business days after Contractor's bid is due to the public body.

Yes ☐ No ☐

Prime contractor has provided this Affidavit of Compliance to all first-tier subcontractors and instructed them to complete it.

Yes ☐ No ☐

Summary of attached documentation (initial next to each item)

_____ Indiana Secretary of State online records

_____ Standards of Apprenticeship/Apprentice Agreements

_____ Employee Drug Testing Plan (or applicable provision from CBA in effect)

_____ Name & description of project managers/superintendents management experience

_____ Documentation of approved surety

_____ Form A: Subcontractor disclosures

NOTE: All of the prime Contractor's first-tier subcontractors shall complete and submit the Affidavit of Compliance to the prime Contractor no later than five (5) business days after the subcontractor's first day of work on the public work project. Prime Contractor shall submit all subcontractor documents to the public body.

Affidavit of Compliance
Contract No. _____

Form A - First-Tier Subcontractors Performing Work on the Project

Prime Contractor shall submit Form A within five (5) business days after the date their bids are due to the public body.

Name	Address	Work to be Performed

Affidavit of Compliance
Contract No. _____

BIDDER VERIFICATION

I certify that I am authorized to execute this Affidavit of Compliance on behalf of the Contractor set forth on page one (1), that I have personal knowledge of all the information set forth herein and that all statements, representations, information and documents provided in or with this Affidavit and attachments hereto are true and accurate.

The Contractor may report any change in any of the facts stated in this Affidavit within fourteen (14) days of the effective date of such change by completing and submitting a new Affidavit. Failure to comply with this requirement is grounds for the Contractor to be deemed a non-responsive and non-responsive bidder.

Signature of Authorized Officer

Name of Authorized Officer (Print or Type)

Title

Telephone Number

State of Indiana

County of _____

Subscribed and sworn to
before me this _____ day of _____, 201__.

Notary Public Signature & Seal

Affidavit of Compliance
Contract No. _____

SUBCONTRACTOR VERIFICATION

I certify that I am authorized to execute this Affidavit of Compliance on behalf of the Contractor set forth on page one (1), that I have personal knowledge of all the information set forth herein and that all statements, representations, information and documents provided in or with this Affidavit and attachments hereto are true and accurate.

The Contractor may report any change in any of the facts stated in this Affidavit within fourteen (14) days of the effective date of such change by completing and submitting a new Affidavit. Failure to comply with this requirement is grounds for the project owner to withhold payment due for work performed.

Signature of Authorized Officer

Name of Authorized Officer (Print or Type)

Title

Telephone Number

State of Indiana

County of _____

Subscribed and sworn to
before me this ____ day of _____, 201__

Notary Public Signature & Seal

Affidavit of Compliance
Contract No. _____



Office of the Lake County Surveyor

Lake County Government Center • 2293 North Main Street • Crown Point, Indiana 46307
Phone: (219) 755-3745 • Fax: (219) 755-3750

Bill Emerson, Jr., P.E.
County Surveyor

CONTRACT # _____

PROJECT: _____

AMOUNT: \$ _____

This CONTRACT is made and entered into this ____ day of _____, 20__ by and between _____, an INDIANA Corporation hereinafter referred to as the "Contractor" and the Lake County Drainage Board, hereinafter referred to as the "Board".

NOW, THEREFORE, in consideration of the mutual promises contained herein, the Board and the Contractor do hereby mutually agree as follows:

I. SCOPE OF WORK

The Contractor shall provide the project services as described herein in Attachment A; in the approved plans and specifications, and any modifications or addenda thereof, which are attached hereto or otherwise incorporated herein by reference; in the terms contained in any permits obtained or not yet approved and any monies to be received from contributing municipalities; and in the Contractor's bid/response and any supplemental responses, and subsequent negotiations arising therefrom, all of which is incorporated herein by reference. Where there is an inconsistency between these terms, the term that is most beneficial to the Board shall control.

The Contractor shall perform the work covered by this Contract under the supervision of the Lake County Surveyor and/or its designee.

The Contractor shall comply with all plans, specifications, terms and conditions of this Contract. Deviation from said plans, specifications, terms or conditions shall be a basis for an immediate cease and desist notice of said unauthorized activity by the Board or the Lake County Surveyor's Office and, where appropriate as determined by the Board or the Lake County Surveyor's Office, cease and desist of contract activity until further action taken by the Board at its next public meeting.

The scope of work occurs on private property and/or within and upon a regulated drain and its easement as authorized by statute. The Contractor has the authority to keep unauthorized persons from the job site in order to avoid any potential liability arising therefrom. Should such persons fail to leave said site, the Contractor is to immediately contact the Lake County Surveyor's office, who may contact the Lake County Sheriff to maintain a safe work site and limit any liability of Lake County or the Contractor for any alleged claims or damages.

Soil Conditions

The Contractor agrees to accept full responsibility for its conclusions relative to the nature and probable difficulties of the work due to underground structures and soil conditions.

The results of subsurface soil investigations shown on the drawings or given in the specifications are for general information only. Neither the Lake County Drainage Board nor the engineer guarantees that materials other than those given in this information will not be encountered or that the proportions of the various materials will not vary from the information indicated on the plans or given in the specifications.

The Contractor shall be responsible for making its own subsurface soil investigations and shall make its own determinations from the investigations. The Contractor waives all claims for damages which it may suffer by reason of the inadequacies or discrepancies of the underground information shown on the plans or provided in the specifications. No compensation will be paid to the Contractor due to inadequacies or discrepancies in subsurface data furnished by Lake County Drainage Board or by the engineer.

Materials

No materials of any kind shall be used until they have been examined by the Lake County Surveyor or his engineer or other person authorized by the Lake County Surveyor, who shall have full power to condemn any work or materials not in accordance with these specifications, and to require the Contractor to remove any work or materials so condemned, and at the contractor's own expense to replace such condemned work or materials to the Lake County Surveyor or his engineer's satisfaction. The decision of the Lake County Surveyor or his engineer shall be final as to quality of workmanship and materials.

Clean up

During the time that the work is in progress the Contractor shall make every effort to maintain the site in a neat and orderly condition. All refuse, broken pipe, excess fill material, cribbing, etc., shall be removed as soon as practicable. Should the work not be maintained in a satisfactory condition the Lake County Surveyor or his engineer, or other person authorized by the Lake County Surveyor, may cause the work to stop until the "clean-up" portion of the work has been done to the satisfaction of the Lake County Surveyor and/or its engineer.

The work will not be considered complete and the final payment certificate issued until all rubbish, unused material or equipment due to or connected with it shall have been removed and the premises left in a condition satisfactory to the Lake County Surveyor and/or its engineer.

II. PAYMENT OF SERVICE

- a. For the services rendered by the Contractor, the Board shall pay to the Contractor the sum of _____ DOLLARS AND _____ CENTS (\$ _____).
- b. No payment under paragraph (a) above shall be made until:
 - (1) The Lake County Surveyor has filed with the Board a written report approving the work performed by Contractor as required under this contract.
 - (2) The Contractor shall have filed with the Board a waiver of lien and verified statement that all expenses incurred for labor, material, and suppliers have been paid in full.
- c. Billing for the services rendered under this contract shall be in the form and manner prescribed by the State of Indiana and the Board.
- d. Approval of payment claims shall be made at a regular Board Meeting. Should there be a dispute regarding any invoice or payment thereof, the party raising the dispute shall notify the other party upon discovery thereof. Payment of any invoice shall not be a waiver of any right associated with a dispute with the invoice or

- payment, and any future payment may be modified accordingly to rectify any discovered discrepancy.
- e. Fifteen percent (15%) of the contract price shall be withheld by the Board for a period of 60 days after completion of the work and its acceptance by the Lake County Surveyor for the purpose of securing payment of suppliers, laborers, and subcontractors, if any. However, if the Contractor files waivers of lien from all subcontractors, suppliers and laborers of this project, the 15% retainage may be paid along with the final payment under this contract.
 - f. The sources of funds for payment under this Contract is the Lake County Drainage Board and/or such other applicable and appropriate sources of funds as apply to the scope of work to be performed on behalf of the approved budget for this specific project, and more specifically the line item therein for the payment of these services. By execution of this Contract the Lake County Drainage Board or Lake County is not agreeing to use funds other than the funds in the budget for the purposes enunciated herein. The sources are restricted to those funds which have been appropriated for this purpose by the Lake County Council as applicable and approved by the Department of Local Government Finance, the State Board of Accounts and/or State Board of Tax Commissioners, or other participating governmental entities as applicable. In this regard this Contract may be terminated, in whole or in part, when the Lake County Auditor makes a written determination that the funds are not appropriated or otherwise available to support continuation of performance, or when the Lake County Surveyor makes a written determination that contributing funds are not appropriated or otherwise available to support continuation of performance. Such determination shall be final and conclusive. Notice shall be given to the Contractor as soon as the Board is aware of such a situation. However, the Board will make good faith efforts to provide funding for this Contract, and if such funding is available and appropriated, the Board shall fulfill its financial obligation, subject to all terms and conditions herein.

III. SUBLETTING AND ASSIGNMENT OF CONTRACT

No portion of the Contract shall be sublet, assigned or otherwise disposed of, except with the written consent of the Board. Consent to sublet, assign, or otherwise dispose of any portion of the Contract shall not be construed to relieve the Contractor of any responsibility for the fulfillment of the Contract.

IV. SUCCESSORS AND ASSIGNEES

The Contractor binds its successors, executors, administrators and assignees to all covenants of this Contract. The Contractor shall not assign, sublet or transfer its interest in this Contract without the prior written consent of the Board, except as above set forth.

V. TERM OF CONTRACT

Time is of the essence. The Contractor shall complete the work under and pursuant to this Contract within 180 days, including Saturdays, Sundays, and holidays. Should the Contractor fail to do so, the Lake County Drainage Board is entitled to and may retain, from compensation otherwise to be paid, or may otherwise pursue payment thereof, One Hundred Dollars (\$100.00) for each day, Sundays and holidays not included, that the work remains uncompleted beyond the specified period, which sum is agreed on as the proper measure of liquidated damages that Board will sustain by the failure of contractor to complete the work in the time stipulated, and this sum is not to be construed in any sense as a penalty.

When good cause for a delay in the work is shown by the Contractor, the Lake County Surveyor shall determine the seriousness of the delay and extend the time of completion of the work accordingly and in his sole discretion. Such good cause may include, but is not limited to, changes in the work, strikes, lockouts, or other labor disputes; fire, earthquake, or other natural disasters; unavoidable casualty or damage to personnel, materials, or equipment; delay in receiving materials or equipment; acts or neglect of the Board, the Board's representative, or an employee of either; acts or neglect of another Contractor employed by the Board, or any other person not directly responsible to Contractor; or other such similar cause beyond the control of the Contractor.

Any claim by Contractor for an extension of time must be made in writing to the Lake County Surveyor not more than one (1) day following the development of the cause for delay. However, in the case of a continuing cause of delay, only one claim need be made. Whenever the Lake County Surveyor or its representative in his or her own discretion determines that circumstances warrant an extension of time, he or she may grant such an extension until a claim of delay has been submitted by the Contractor.

VI. CHOICE OF LAW

This Contract shall be construed in accordance with and governed by the laws of the State of Indiana and suit, if any, must be brought in Lake County, State of Indiana.

VII. INSURANCE/SECURITY/INDEMNITY

The Contractor shall carry or require that there be carried Workmen's Compensation Insurance for all its employees and those of its subcontractors in accordance with state or territorial Workmen's Compensation laws.

The Contractor shall carry or require that there be carried public liability and property damage insurance in amounts as outlined in IC 34-13-3 (or any subsequently enacted applicable statute) to protect the Board and County, the Contractor and its subcontractors from claims which may arise from work under this Contract. The Board shall be named as an additional insured and be fully protected thereunder.

All insurance as required herein shall be effective for acts occurring during and shall be maintained during the entire life of this Contract.

The Contractor shall maintain during the term of the Contract a performance bond, payable to the Lake County Drainage Board, providing security for the Contractor's performance obligations in the amount of the Contract. Said bond may be reduced to an amount not less than the amount of the remaining item costs in said Contract.

The Contractor agrees to indemnify and hold harmless Lake County, the Lake County Drainage Board, the Lake County Surveyor, its officials, its departments, its boards, its employees, and its agents and assigns against all actions, claims or demands for damages of any kind whatsoever, known or unknown, which may in any way be caused by the negligent acts of the Contractor, including but not limited to the negligent digging up of streets, alleys or public grounds, and by improper care of trees and shrubbery, or which may result from the default, carelessness or negligence of the Contractor, its agents, employees or workers under its control or direction in the performance of the work described herein, and shall refund and reimburse to the Lake County Drainage Board all sums which it may be obligated or adjudged to pay on any such claims or demands immediately upon such determination.

VIII. REMEDIES UPON DEFAULT

If either party of this Contract shall be in default of any of the terms and conditions hereof, the party complaining of the default shall notify the defaulting party in writing of the default complained of, and the defaulting party shall have ten (10) days from the date of receipt of said written notification in which to cure the default complained of therein. Only after the expiration of the ten (10) day period described herein may the parties resort to legal proceedings to enforce any of the terms and conditions of this Contract or to collect damages in a court of competent jurisdiction.

Should the Contractor be cited on three or more occasions by the Lake County Surveyor or Contract Engineer on the project, the Contract is subject to termination for cause, as determined by the Board at a public meeting.

IX. EQUAL EMPLOYMENT AND AFFIRMATIVE ACTION

- a. The Contractor agrees by the execution of this contract that the terms of its executed Affidavit of Equal Employment and Affirmative Action submitted with its bid documents are incorporated herein by reference.
- b. The provisions of all Federal Civil Rights laws and the Indiana Civil rights laws as applicable are incorporated by reference as part of this Contract.
- c. Breach of any of the equal opportunity and/or the nondiscrimination provisions of the Contract may be regarded as a material breach of the Contract.
- d. Where applicable, nondiscriminatory clauses and affirmative action clauses shall be made a part of any agreement, contract or lease between Contractor and any organization, corporation, subcontractor or other legal entity that benefits from the funds paid to Contractor by this Contract.

X. LIMITATION OF AUTHORITY

The Contractor has no authority to obligate the Board on any contract or agreement of any kind, character or nature, nor for any expense, except as otherwise delineated in this Contract.

XI. PERSONNEL/INDEPENDENT CONTRACTOR

The Contractor represents that it has, or will secure at its own expense, all personnel required in performing the services under this Contract. Such personnel shall not be employees of or have any contractual relationship with the Board. All of the services required hereunder will be performed by the Contractor or under its supervision, and all personnel engaged in the work shall be fully qualified to perform such services.

XII. ADDITIONAL SERVICES

In the event that any additional services are required of the Contractor that are over and above those described in the Contract and attachments hereto, the services shall not be performed without the express prior written agreement between the Board and Contractor. The scope of additional services and fees to be charged shall be specified in any such written authorization.

XIII. SUBSTANTIAL PERFORMANCE

This Contract shall be deemed to have been substantially performed only when fully performed according to its terms and conditions and any modification thereof.

XIV. WAIVER OF RIGHTS

No right conferred on either party under this Contract shall be deemed waived and no breach of this Contract excused, unless such waive or excuse shall be in writing and signed by the party claimed to have waived such right.

XV. E-VERIFICATION

- A. IC 22-5-1.7 Chapter 1.7. Public Contract Services, Business Entities; Unauthorized Aliens.
- B. IC 22-5-1.7.2 “Contractor” As used in this chapter, “contractor” means a person that has or is attempting to enter into a public contract for services with a state agency or political subdivision.
- C. IC 22-5-1.7-3 “E-Verify program” As used in this chapter, “E-Verify program” means the electronic verification of work authorization program of the Illegal Immigration Reform and Immigration Responsibility Act of 1996 (P.L. 104-208), Division C, Title IV,s. 403(a), as amended, operated by the United States Department of Homeland Security or a successor work authorization program designated by the United States Department of Homeland Security or other federal agency authorized to verify the work authorization status of newly hired employees under the Immigration Reform and Control.
- D. IC 22-5-1.7-4 “Person” As used in this chapter, “person” means an individual, a corporation, a limited liability company, a partnership, or another legal entity.
- E. IC 22-5-1.7-5 “Political subdivision” As used in this chapter, “political subdivision” has the meaning set forth in IC 36-1-2-13.
- F. IC 22-5-1.7-6 “Public contract for services” As used in this chapter, “public contract for services” means any type of agreement between a state agency or a political subdivision and a contractor for the procurement of services.
- G. IC 22-5-1.7-9 “Unauthorized alien” As used in this chapter, “unauthorized alien” has the meaning set forth in 8 U.S.C. 1324a(h)(3).
- H. IC 22-5-1.7-11 Contractors with public contract for services required to use E-Verify program; business entities that receive certain grants required to use E-Verify program Sec. 11.
 - a. This subsection applies only to a public contract for services entered into or renewed after June 30, 2011. A state agency or political subdivision may not enter into or renew a public contract for services with a contractor unless:
 - 1. the public contract contains:
 - A. a provision requiring the contract to enroll in and verify the work eligibility status of all newly hired employees of the contractor through the E-Verify program; and
 - B. a provision that provides that a contractor is not required to verify the work eligibility status of all newly hired employees of the contractor through the E-Verify program if the E-Verify program no longer exists; and
 - 2. the contractor signs an affidavit affirming that the contractor does not knowingly employ an unauthorized alien.
 - b. A state agency or political subdivision may not award a grant of more than one thousand dollars (\$1,000) to a business entity unless the business entity:
 - 1. signs a sworn affidavit that affirms that the business entity has enrolled and is participating in the E-Verify program;
 - 2. provides documentation to the state agency or political subdivision that the business entity has enrolled and is participating in the E-Verify program; and
 - 3. signs an affidavit affirming that the business entity does not knowingly employ an unauthorized alien
- I. IC 22-5-1.7-15 Certification by subcontractor. If a contractor uses a subcontractor to provide services for work the contractor is performing under a public contract for

services, the subcontractor shall certify to the contractor in a manner consistent with federal law that the subcontractor, at the time of certification:

1. does not knowingly employ or contract with an unauthorized alien; and
 2. has enrolled and is participating in the E-Verify program.
- J. Affidavit by Contractor. By execution of this contract I swear under the penalties of perjury that my company does not knowingly employ an unauthorized alien.

XVI. MISCELLANEOUS PROVISIONS

This Contract represents the entire understanding between the parties, and modifications of this Contract shall not be effective unless reduced to writing and signed by both parties. In the event any portion or portions of this Contract are found to be void or voidable portions, these portions shall be stricken and the remaining portions enforced.

All provisions of State Law applicable to the County and/or governmental entity or entities which is/are a party to this Contract are incorporated by reference as a part of this contract.

In the event this Contract is not fully executed and approved prior to the date of commencement, it shall be deemed retroactive in force and effect to the date of commencement upon and after the full execution, approvals, required filing and recordation.

IN WITNESS WHEREOF, the parties hereto have caused this Contract to be executed by their duly authorized officers on the day and date first above written.

LAKE COUNTY DRAINAGE BOARD

MICHAEL C. REPAY, CHAIRMAN

KYLE W. ALLEN, SR., MEMBER

JERRY TIPPY, MEMBER

LAKE COUNTY SURVEYOR

WILLIAM EMERSON, JR., P.E.

CONTRACTOR

Corporate Name

Address

City, State, zip Code

Phone Number

E-mail Address

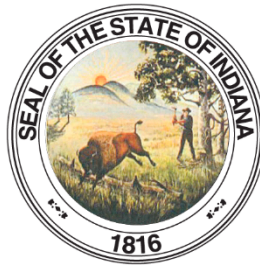
By: _____

PLANS & SPECIFICATIONS FOR

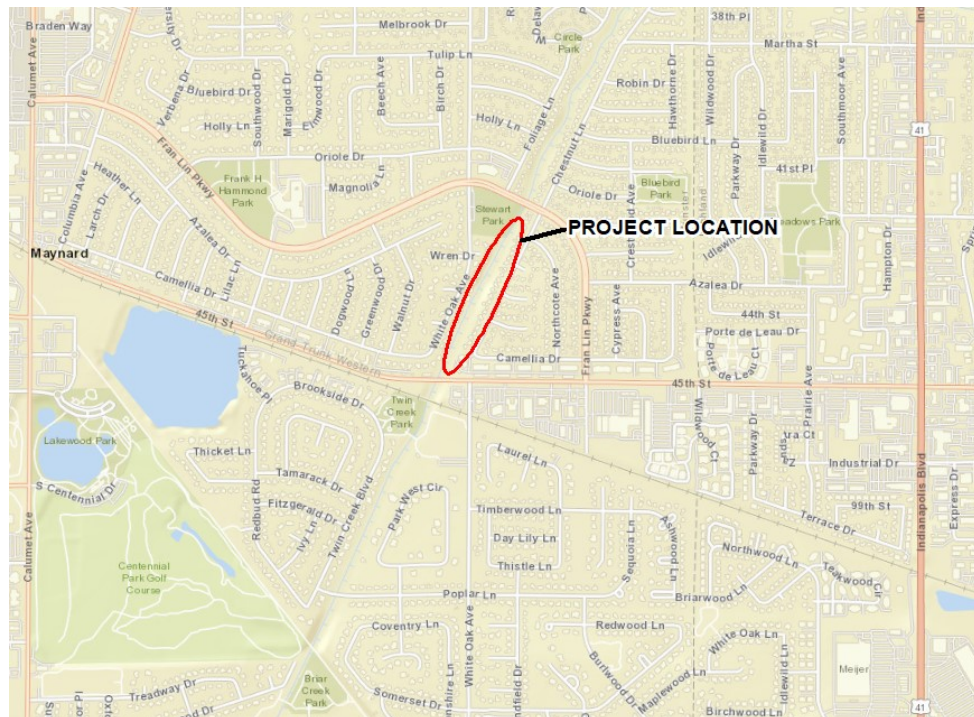
HART DITCH STABILIZATION IN MUNSTER - 2024

MUNSTER, INDIANA
PLUM CREEK-HART DITCH WATERSHED

PREPARED FOR
LAKE COUNTY DRAINAGE BOARD



LAKE COUNTY SURVEYOR – BILL EMERSON, JR., PE



CHRISTOPHER B. BURKE ENGINEERING, LTD
9575 W Higgins, Suite 600 Rosemont, IL 60018, Telephone (847) 823-0500

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HART DITCH STABILIZATION IN MUNSTER - 2024

MAINTENANCE PROJECT

SPECIAL INSTRUCTIONS TO BIDDERS

A. GENERAL INFORMATION

1. It is the intention of the Lake County Drainage Board, hereinafter referred to as the Board, to secure bids for maintenance work to be performed on HART DITCH STABILIZATION IN MUNSTER - 2024 hereinafter referred to as the Project, as identified and described herein and in the plans and specifications prepared by Christopher B. Burke Engineering, LTD, hereinafter referred to as the Engineer.
2. All bids for the proposed work shall be submitted on a unit price or lump sum basis, as applicable, and as set forth on the bid proposal form attached herein, all in accordance with the project documents.
3. The Board intends to review all bids for the project and upon final review and determination, award the bid to the successful bidder. Among other considerations, the successful bidder will be determined by the lowest overall total bid as provided in the bid proposal form attached herein. The total quantity of work to be awarded by the Board will be based on the total dollars available at the time of contract award and the respective applicable unit prices and/or lump sums of the successful bidder.
4. The bid proposal form to the Board consisting of 2 pages, as set out hereinafter, shall be attached and submitted with Bid Form 96.

B. BIDDERS INFORMATION

1. It is the responsibility of all project bidders to review all bid documents to ascertain their effect on each bid.
2. It is the responsibility of all project bidders to carefully examine the project site and fully inform himself/herself with the limitations and conditions related to the work covered by his/her bid and shall include in his/her bid a sum to cover the cost of all such items. It is the purpose and intent of the contract documents that a fully complete job be accomplished. It is the responsibility of each bidder to include all costs necessary to provide all labor, materials and equipment for the portion of the work bid upon, including incidentals, whether or not specifically called for in the project plans and specifications. Each bidder by making his/her bid represents that he/she has read and understands the bid documents and represents that he/she has visited the site and has familiarized himself/herself with all the conditions under which the work is to be performed. Site access is the sole responsibility of the Contractor. **Areas disturbed as part of access to any portion of the Project should be properly stabilized and restored to existing conditions. A pay item has been added for this restoration, however,**

additional restoration may/should be considered incidental to the contract.

3. It is the responsibility of all bidders to contact all utility companies and public and/or private agencies to become familiar with the specific locations of all existing utilities and systems that will affect the work. The successful bidder shall protect all such systems and utilities, including all other improvements which may exist within or adjacent to the work area during the prosecution of the work. All existing improvements, utilities and systems that may be damaged during construction shall be repaired and/or replaced to a condition at least equal to that prior to such damage at no additional expense to the Board. All such companies shall be notified prior to commencement of the work in order that all such lines be located and identified by the affected companies.
4. All inquiries as to the documents, interpretations, substitutions, conflicts, discrepancies, omissions and questions shall be referred to the Engineer, representative of the Board, who in turn will refer same to the Board.
5. All bidders in doubt as to the true meaning of any part of the project documents shall submit to the Engineer, not less than seven (7) days before the bid deadline, a written request for interpretation and clarification.
6. Bidders are responsible for acquiring any and all issued addenda in time to incorporate them into their bid. Each bidder shall enumerate all addenda he/she has received in his/her bid.
7. All bidders and their sub-contractors, if any, shall furnish proof, satisfactory to the Board that they are in good standing and are authorized to do business in the State of Indiana and that they are duly licensed to perform work within the County of Lake. All bidders shall hold a General Contractor License from the County of Lake. All bidders shall furnish a list of their sub-contractors, if any, including name, address and telephone numbers.
8. The County's affirmative action program as adopted by the County of Lake, dated May 31, 1977, a copy of which is on file in the Lake County Auditor's office and the office of the Board of Commissioners of the County of Lake, is a condition of the project documents. The bidder shall submit, together with his/her bid, in writing, his/her affidavit, that he/she will comply with the County's affirmative action program.
9. It is recommended that all bidders attend any and all pre-bid conferences that may be scheduled by the Board.
10. The Lake County Surveyor, or their designated agent, will perform project supervision and periodic inspections to determine compliance with all project documents; percentages or inspections will include measurements and elevations of the completed work for compliance with the plans and specifications prior to payment recommendations to the Board.

11. The Contractor shall be permitted to submit claims for payment on a monthly basis as the work progresses, subject to a fifteen percent (15%) retainage, all as approved by the Lake County Surveyor and the Engineer. Fifteen percent (15%) of the completed value of the work shall be withheld by the Board for a period of sixty (60) days after the completion of the work and its acceptance by the Lake County Surveyor and the Engineer for the purpose of securing payment of suppliers, laborers and sub-contractors, if any.

The Contractor shall be required to furnish a sworn statement of all indebtedness for labor and materials furnished, used or extended for said construction, the amount of due and to become due to each sub-contractor and material supplier before issuance of any payment, and final waiver of lien and an affidavit showing all bills, on the issuance of the final payment.

Upon certifications by the Lake County Surveyor and the Engineer, the Board shall pay to the Contractor, on account of the contract, the value of labor and materials incorporated into the work.

12. A bid security in the form of a certified check/cashier's check or a bid bond from an acceptable surety made payable to the Board shall accompany each bid. The bid security shall be in the penal amount of five percent (5%) of the total bid. Bid security shall be forfeited if the bid is withdrawn after closing time on the date for receiving bids. Out of state bidders must submit a certified check of ten percent (10%) of the total bid made payable to the Board.

Upon execution of the contract, the successful bidder shall give to the Board a bond payable to the Board, in an amount fixed by the Board but not less than the amount of the bid, and with a corporate surety licensed to do business in Indiana. The bond must be conditioned on the faithful performance of the contract and the payment of all expenses and damages incurred under the contract, including payment of all suppliers, laborers, and sub-contractors. However, in lieu of a corporate surety bond, the Board may accept:

- (1) a cash bond;
- (2) a property bond; or
- (3) a bond from a sufficiently financed private bonding company.

13. All Contractors, including sub-contractors, shall carry full insurance coverage and certificates of insurance shall be delivered to the Board, upon signing of the contract.
 - a. Workmen's Compensation, as required by applicable Federal and State laws.
 - b. Contractor's Liability, including contractual liability, form of insurance shall be comprehensive general liability and comprehensive automobile liability \$500,000 CSL; for bodily injury, property damage and personal injury, including complete operations broad form; bodily injury and property damage, automobile liability, owned, non-owned and hired.
 - c. In addition to the above, the Contractor shall provide operations and products liability, XCU coverage and \$1,000,000 umbrella liability.
 - d. At all times during the progress of the work, the Contractor shall maintain such

insurance as will protect and save harmless the Board, and its agents, from claims under the Workmen's Compensation Act, from any and all other claims for damages for property damage, personal injury and/or death and patent infringement, which may arise from operation under the contract documents, whether such act or omission be by itself or by an employee or sub-contractor or anyone directly or indirectly employed by either of them; and certificates of such insurance as required by the project documents shall be filed with the Board.

- e. Should the Board suffer any damage, cost or expense, including attorney's fees, in any manner, because of any wrongful act or negligence of the Contractor, or anyone employed by it or a sub-contractor or the assertion of any claim of whatever nature which arises from operation under the contract documents, then the Contractor shall reimburse the Board for any such damage and all reasonable attorney fees and expenses related to such claim and/or reimbursement thereto, all without relief from validation and appraisal laws.

C. RIGHT OF THE BOARD

- 1. The Board reserves the right to issue addenda changing, altering or supplementing the contract documents, at any time prior to the bid deadline.
- 2. The Board reserves the right to reject any or all bids and to waive any information or irregularity in any bid accepted.
- 3. The Board reserves the right to approve or reject any sub-contractor submitted by the bidders.
- 4. The Board reserves the right to award all or individual projects within the scope of work to comply with available funds.

APPROVED AND RATIFIED THIS **15th** DAY OF **November, 2023**.

LAKE COUNTY SURVEYOR

LAKE COUNTY DRAINAGE BOARD

Bill Emerson, Jr., PE

Michael C. Repay, Chairman

ATTEST:

Jerry Tippy, Member

Secretary of the
Lake County Drainage Board

Kyle W. Allen, Sr., Member

GENERAL INFORMATION

A. IDNR, USACE AND IDEM PERMITS

The Board will procure all necessary permits from the Indiana Department of Natural Resources (IDNR), the Army Corps of Engineers (USACE), and the Indiana Department of Environmental Management (IDEM) for the performance of the work. All such permits are considered part of the project documents, and all work shall be performed in strict compliance with all provisions and conditions therein. In the event discrepancies exist between the project documents and the provisions and conditions of such permits, the Contractor shall immediately notify the Lake County Surveyor and the Engineer to resolve any such discrepancy.

B. CONSTRUCTION METHODS AND STANDARDS

All construction methods, standards and specifications, as adopted by the Board shall govern the performance of the work unless otherwise specified in the project documents.

C. WORK WITHIN EASEMENTS

All work shall be performed with as minimal a disturbance footprint as possible. There is no drainage easement along this stretch of Hart Ditch. Access to the waterway from rear and side yards of residential parcels must be coordinated by the Contractor with homeowners. The Contractor shall also coordinate with the Munster Parks and Recreation Department for access to Stewart Park.

D. MAINTENANCE OF DRAINWAYS

All construction shall be performed in such a manner that will not interfere with existing drainage of the areas adjacent to the project. All work shall be performed in such a manner that will ensure proper drainage.

E. AUTHORIZATION TO PROCEED

No work shall be performed prior to receipt of "Authorization to Proceed" notification from the Lake County Surveyor.

F. CONTRACTOR'S SCHEDULE

The Contractor will be requested to attend a pre-construction conference to be scheduled by the Lake County Surveyor at which time the Contractor will be required to submit a construction schedule to the Lake County Surveyor prior to commencement of the work.

ATTACHMENT A

TECHNICAL SPECIFICATIONS
FOR
HART DITCH STABILIZATION IN MUNSTER - 2024

LAKE COUNTY, INDIANA

LAKE COUNTY DRAINAGE BOARD

MICHAEL REPAY, CHAIRMAN
JERRY TIPPY, MEMBER
KYLE W. ALLEN, SR., MEMBER

COOPERATION WITH PUBLIC UTILITIES

Prevailing INDOT Specification: 105.06

Damage to any of the existing public utility facilities within the limits of the Project not specifically shown to be removed or adjusted, caused by the CONTRACTOR's operations or equipment, shall be repaired by the CONTRACTOR or public utility at no expense to the Lake County Surveyor's Office. If such damage is repaired by the public utility, it shall be the responsibility of the CONTRACTOR to accept the expenses charged by the public utility performing such repairs. It shall also be the responsibility of the CONTRACTOR to coordinate with public utilities affected by such damage.

The approximate locations of some of the public utility facilities and appurtenances are shown on the plans and, in some cases, called out on the plans to be protected, held, or braced, depending on the nature of the work near the facility or appurtenance. These call outs are intended to be guidance and represent actions that, in the opinion of the ENGINEER, the CONTRACTOR should do to ensure the risk of damage to public utilities is limited to a minimum. It is the CONTRACTOR'S responsibility to coordinate with the relevant public utility to determine the actual protective measures for these facilities and appurtenances executed in the field. There will be no measurement and payment for this work, even if specifically noted on the plans.

UTILITY INFORMATION

The utilities are beyond the control of the Lake County Surveyor's Office. Coordination with any applicable utility or utilities shall be the sole responsibility of the CONTRACTOR. CONTRACTOR shall be responsible for the availability and accuracy of information relating to the utilities.

All of the permanent and temporary utility facilities in their present or relocated positions shall have been considered in the bid. No additional compensation will be allowed for suspensions, delays, interference, hindrances, inconvenience, or damage sustained by CONTRACTOR due to said utility facilities or the operations of moving them.

Water lines, gas lines, wire lines, service connections, water and gas meter boxes, water and gas valve boxes, light standards, cableways, signals, and all other utility facilities within the Project limits which are to be relocated or adjusted are to be moved by the public utility which owns them, at the expense of the respective public utility. Notwithstanding the preceding sentence, the CONTRACTOR shall be responsible to relocate or adjust all facilities owned by the Town of Munster and all facilities not owned by public utilities or for which the public utility is not responsible, at the expense of the CONTRACTOR. The CONTRACTOR is responsible for all costs associated with the protection of utilities not specifically identified for relocation.

The following is provided for information purposes only and neither OWNER nor ENGINEER guarantees its accuracy or completeness.

Indiana Underground Plant Protection Service, Inc
(800) 382-5544

Town of Munster, Department of Public Works:

Contact: Dave White
Phone: (219) 836-6978

AT&T (Phone / Fiber)

Contact: Dennis Protega
Email: dp7986@att.com
Phone: (219) 662-4689

NIPSCO (Gas & Electric)

Coordination: utilitycoordination@nisource.com
2nd Contact: Dean Garrett
Email: DAGarrett@nisource.com
Phone: (219) 647- 6260

Comcast

Contact: Larry Smith
Email: larry_smith3@comcast.com
Phone: (574) 320-8203

AT&T (High Transmission Fiber)

Contact: Kim Holland
Email: kh2194@att.com
Phone: (312) 925-7698

Surf Wireless

Contact: Mike Sammartano
Email: msammartano@surfinternet.com

STREET CLEANING

Dust Control shall be in accordance with the requirements of Section 107.08(b) of the INDOT Standard Specifications and as follows:

The CONTRACTOR shall provide effective dust control in all phases. Loader-mounted pick-up, power sweepers, or other types of pull type models shall be used in all phases of street cleaning.

Street cleaning will not be paid for directly but shall be included in the cost of various items of the contract.

LOAD RESTRICTIONS

Legal load restrictions shall be complied with on public roads beyond the limits of the Project. A special permit will not relieve the CONTRACTOR of liability for damage which may result from the moving of equipment.

The operation of equipment of such weight or so loaded as to cause damage to structures or the roadway or to any other type of construction will not be permitted. No loads will be permitted on concrete pavement, concrete bases, or structures before the expiration of the curing period. The CONTRACTOR shall be responsible for all damage done by the CONTRACTOR, its employees, agents, or SUB-CONTRACTORS.

This requirement will serve as written notice that hauling or handling of materials on completed or partially completed structures, pavement structures, or paved shoulders in excess of legal weight limits will not be permitted unless approved in advance of the operation. Approval shall be obtained from the authority having jurisdiction over the structures, pavement structures, or paved shoulders.

CLEARING & GRUBBING

General Requirements: This work shall be performed as described in detail in the Indiana Drainage Handbook (Section 5.1, Practices 102, 105, 106, & 107, and Section 5.13, Practice 1301). A copy of the latest version of the Handbook is available online through the IDNR at <http://www.in.gov/dnr/water/4893.htm>.

Prevailing INDOT Specification: 201

Additions

Description: This work shall consist of removing excess/overgrown vegetation, accumulations of logs, woody debris, root wads, large branches, trees, tree stumps, fallen trees, trees in danger of falling into the stream or obstructing the flow, and other debris/trash along the bank within the limits of the Project as specified on the plans to prepare for construction activities.

Scope of Work Limits: Work limits shall be up the full side of the bank or less, depending on the type of stabilization measure proposed. The limits of areas to be cleared and grubbed should be marked with stakes, flags, or other suitable methods.

Access: Access to and within the work site shall be from Stewart Park and residential side and rear yards. Written agreements shall be made by the CONTRACTOR with the Munster Parks and Recreating Department and adjacent landowners for access to the waterway.

Equipment: Chainsaw, weed whips, brushhogs, portable winches, tractors loaders, and backhoes equipped with a hydraulic thumb and bucket shall be used for removal of trees, stumps, shrubs, and brush.

NOTE: A marine grade oil spill kit shall be kept on-site during all construction activities.

Removal of Excess Vegetation/Shrubs and Foreign Material: At the locations of 'Full Bank Side Slope Stabilization' and 'Scourlok Stabilization' proposed measures, the CONTRACTOR shall cut and grub excess/overgrown vegetation and shrubs with the appropriate equipment.

At the locations of 'Tucked Boulder Toe Stabilization', the CONTRACTOR shall only perform "Clearing", which includes cutting excess/overgrown vegetation and shrubs with the appropriate equipment. The stumps and root system shall be left in place so as to not disturb subsurface and the streambank more than is needed.

At all other locations, if the CONTRACTOR notices rubbish/trash, excess vegetation, or other foreign material, he/she shall remove such items from the streambank or channel, however, the root system shall be left in place. Living vegetation shall be left at these locations. Any cut vegetation/shrubs, rubbish/trash, and foreign material from the site shall be disposed of off-site by the CONTRACTOR.

Removal of Trees, Tree Parts, and Foreign Material: At the locations of 'Full Bank Side Slope Stabilization' and 'Scourlok Stabilization' measures, the CONTRACTOR shall cut and grub the called-out trees with the appropriate equipment. Trees to be left standing and uninjured should be designated by special marks placed about 6' high on the trunks. Preserved trees should be protected with appropriate measures. These preserved trees are located on the upper half of the streambank and are healthy, large diameter ones. If the CONTRACTOR cannot preserve these trees, the ENGINEER shall be notified with pictures before removal.

At the locations of 'Tucked Boulder Toe Stabilization', the CONTRACTOR shall only perform "Clearing" which includes the removal of the called-out trees with the appropriate equipment. The stumps and root system shall be left in place so as to not disturb the subsurface and streambank more than is needed.

At all other locations within the limits of the Project, if the CONTRACTOR notices a downed tree or a tree in danger of falling, he/she shall remove such objects from the streambank or channel. At these other locations, if a tree needs to be cut down, the stump and root system shall be left in place. Any cut trees from the site shall be disposed of off-site by the CONTRACTOR.

It shall be the CONTRACTOR'S responsibility to walk the site and estimate the size and number of these trees to be removed and report the findings back to the ENGINEER before construction commences.

Stumps shall be cut as low as possible and parallel with the slope of the bank but in no case higher than twelve inches, unless authorized by the Lake County Surveyor's Office. Stump splinters shall also be cut off. It shall be the CONTRACTOR'S responsibility to walk the site and estimate the size and number of these trees to be removed. Cut stumps shall be treated with herbicide as soon as possible after cutting, preferably less than 2 hours. Stumps should be saturated, especially in the cambial area. Cut stumps shall be treated with Garlon 3A or approved equal. Tordon will not be allowed.

Removed Tree and Tree Parts: All trees, logs and other tree parts cut, broken, and/or removed by the CONTRACTOR shall be disposed of off-site unless other written arrangements have been made with adjacent landowners and approved by the ENGINEER.

Trees will not be measured on an individual basis. The cost for each tree removal shall be included in the unit price of this pay item. It is the responsibility of the Contractor to view the engineering plans, walk the site, and determine the number of trees to be removed.

Special Considerations:

- Measures should be taken to prevent erosion and siltation during clearing and/or grubbing activities.
- All areas cleared and/or grubbed should be stabilized as soon as possible with temporary seeding and/or mulch.

- No vegetation shall be removed from upland areas and within residential rear yards unless needed for access. A written agreement shall be made by the CONTRACTOR with adjacent landowners if vegetation removal is needed in these areas for access.

Price: The unit price shall include all cutting, relocation and removing of trees, tree parts, stumps, shrubs, excess vegetation, foreign material, off-site disposal, and all other items necessary to complete the work to the satisfaction of the Lake County Surveyor.

Method of Measurement and Payment: This work shall be measured for payment in ACRE. An extra 0.2-acres was added to the quantity for this pay item to account for the removal of any excess vegetation/shrubs, downed trees, leaning trees, and rubbish/trash along the streambank, within the Project limits, which is not specifically called out on the plans.

Measurement and Payment: This work shall be paid for at the contract unit price per ACRE for CLEARING AND GRUBBING.

EARTH EXCAVATION

General Requirements: This work shall be performed as described in the Indiana Drainage Handbook (Section 5.6, Practice 602). A copy of the latest version of the Handbook is available online through the IDNR at <http://www.in.gov/dnr/water/4893.htm>.

Prevailing INDOT Specification: 203

Additions

Description: This work shall consist of the excavation of eroded slopes to prepare for bank stabilization measures.

Access: Access to and within the work site shall be from Stewart Park and residential side and rear yards. Written agreements shall be made by the CONTRACTOR with adjacent landowners for access to the site.

Excavation: The CONTRACTOR shall excavate bank soil within the specified project limits to the extent necessary to prepare for bank stabilization measures.

The Contractor shall report their findings to the owner/engineer if they are found to be different.

Special Consideration:

- The removal of bank soil shall be done immediately before proposed streambank activities are to be completed to not further compromise the embankment or decrease the appropriate cross-sectional waterway opening.
- Transitions in size or dimension of excavated area should be gradual to prevent unstable flow conditions and to avoid sedimentation problems.

Spoil Material: **Spoil material shall be disposed of offsite or used as backfill for bank shaping.** If disposed offsite, spoil material shall be brought to an approved location and in an approved manner by the Lake County Surveyor unless other written arrangements have been made with the adjacent landowners and approved by the Lake County Surveyor. While waiting for offsite disposal, spoil material shall be placed in the nearest non-wetland area in which an arrangement has been made with the landowners. Proper sediment control measures shall be in place around the spoil material while awaiting off-site disposal, such as silt fence and straw wattles.

Excavated material may be used at locations along the Project site which need backfill for bank shaping. This excavated material should be dry, clean, and free from roots and any other objectionable material. The excess spoil to be used as backfill will not be measured and shall be considered incidental to the cost of the Project.

Price: The price shall include all items listed in the "Description." The unit price shall include the excavation, material, labor, equipment, hauling and off-site disposal, and all other items necessary to complete the work to the satisfaction of the Lake County Surveyor.

Method of Measurement and Payment: This work shall be measured for payment in CUBIC YARD. The quantity of this pay item was estimated to be approximately 0.5 cubic yard per running foot of 'Full Bank Side Slope Stabilization', 0.2 cubic yards per running foot of 'Tucked Boulder Toe Stabilization', and 1.0 cubic yard per running foot of "Scourlok Engineered Bank Stabilization.'

Measurement and Payment: This work shall be paid for at the contract unit price per CUBIC YARD of EARTH EXCAVATION removed.

FULL BANK SIDE SLOPE STABILIZATION

General Requirements: This work shall be performed as described in detail in the Indiana Drainage Handbook (Section 5.5, Practice 510; Section 5.10, Practice 1002; and Section 5.11, Practice 1102 and 1104). A copy of the latest version of the handbook is available online through the IDNR at <http://www.in.gov/dnr/water/4893.htm>.

Prevailing INDOT Specification: 616

Additions

Description: This work shall consist of furnishing the lower few feet of the streambank with a layer of stone and the upper half with bioengineered measures at locations shown on the plans to protect from erosion. When completed, the worked section shall approximate the natural slope of the Hart Ditch streambank as shown in the detail on Sheet 17 of the plans. **The bioengineered stabilization measures are to be measured and paid for in separate pay items.**

Access: Access to and within the work site shall be from Stewart Park and residential side and rear yards. Written agreements shall be made by the CONTRACTOR with adjacent landowners for access to the site.

Materials: Materials shall consist of the INDOT REVETMENT RIPRAP, preferably from local sources. The 2023 INDOT Aggregate Specification for riprap shall be used. A nonwoven geotextile fabric should be used under all permanent riprap installations to prevent underlying soil from piping through the stone.

Excavation and Slope Compaction: This work shall include ancillary excavation, grading/flattening of the slope, and compacting the slope. Excavation below the finished riprap shall be deep enough to accommodate the depth of filter fabric and riprap. Slopes shall not be steeper than 2:1 (2H:1V). The CONTRACTOR shall cut a keyway at the base of the slope to reinforce the toe; keyway depth should be 1.5 times the design thickness of the riprap and extend a horizontal distance equal to the design thickness (see the 'Side Slope Stabilization' detail on Sheet 17 of the plans). The foundation toe must be properly reinforced to prevent undercutting or slumping. The excavated/prepared slope as well as any fill material shall be proposed compacted to density of surrounding natural soil before the filter and riprap are placed.

Placement of Riprap: This work shall include the placement of the filter fabric and riprap on a prepared slope. The CONTRACTOR shall first place geotextile fabric on the slope in accordance with manufacturer's guidelines. The CONTRACTOR shall then spread the well-graded aggregate in a uniform layer at 18-inches in depth. Riprap shall be placed to full thickness in 1 operation. **Smaller rock shall be placed in voids to form a dense, uniform, well-graded mass.** Some hand placement of material will most likely be necessary. The CONTRACTOR shall blend the riprap surface smoothly with the surrounding area to eliminate protrusions or overfalls. Riprap may be either hand-placed or dumped, then forcibly compacted (pounded) in using the back of the excavator bucket to be embedded in the streambank. Riprap used must be of sized according to INDOT standard specifications and

extend at least 12 inches below normal water level to provide habitat for aquatic organisms in the voids.

Price: The price shall include all items listed in the "Description." This includes all materials including filter fabric, sand/gravel, placement, shaping, grading, compacting, use of machinery, labor and all other items necessary to complete the work to the satisfaction of the Lake County Surveyor.

Method of Measurement and Payment: This work shall be measured for payment in SQUARE YARDS of filter fabric and TONS for riprap placement. Earth excavation will not be measured and paid for in this pay item, but rather in EARTH EXCAVATION.

Measurement and Payment: This work shall be paid for at the contract unit price per SQUARE YARD of FILTER FABRIC and TON of INDOT REVETMENT RIPRAP installed.

INDOT REVETMENT RIPRAP	TON
FILTER FABRIC	SQ YD

TUCKED BOULDER TOE STABILIZATION

General Requirements: This work shall be performed as described in detail in the Indiana Drainage Handbook (Section 5.5, Practice 510; Section 5.10, Practice 1002; and Section 5.11, Practice 1102 and 1104). A copy of the latest version of the handbook is available online through the IDNR at <http://www.in.gov/dnr/water/4893.htm>.

Prevailing INDOT Specification: 616

Additions

Description: This work shall consist of furnishing the lower few feet of the streambank with a layer of stone. The stone is to be tucked into the streambank at the toe with minimal bank disturbance above. This stabilization measure is not meant to disturb the full streambank, but rather reinforce the streambank toe. Any streambank disturbance to complete this stabilization measure is to be restored with erosion control blanket, seed mix, and live stakes as shown in the detail on Sheet 17 of the plans. **The bioengineered stabilization measures are measured and paid for in separate pay items.**

Access: Access to and within the work site shall be from Stewart Park and residential side and rear yards. Written agreements shall be made by the CONTRACTOR with adjacent landowners for access to the site.

Materials: Materials shall consist of the INDOT REVETMENT RIPRAP, preferably from local sources. The 2023 INDOT Aggregate Specification for riprap shall be used. A nonwoven geotextile fabric should be used under all permanent riprap installations to prevent underlying soil from piping through the stone.

Excavation and Slope Compaction: This work shall include ancillary excavation, grading/flattening of the slope, and compacting the slope. Excavation below the finished riprap shall be deep enough to accommodate the depth of filter fabric and riprap. Slopes shall not be steeper than 2:1 (2H:1V). The CONTRACTOR shall cut a keyway at the base of the slope to reinforce the toe; keyway depth should be 1.5 times the design thickness of the riprap and extend a horizontal distance equal to the design thickness (see the 'Tucked Boulder Toe Stabilization' detail on Sheet 17 of the plans). The foundation toe must be properly reinforced to prevent undercutting or slumping. The excavated/prepared slope as well as any fill material shall be compacted to the density of surrounding natural soil before the filter and riprap are placed.

Placement of Riprap: This work shall include the placement of filter fabric and riprap on a prepared slope. The CONTRACTOR shall first place geotextile fabric on the slope in accordance with manufacturer's guidelines. The CONTRACTOR shall then spread the well-graded aggregate in a uniform layer at 18-inches in depth. Riprap shall be placed to full thickness in 1 operation. **Smaller rock shall be placed in voids to form a dense, uniform, well-graded mass.** Some hand placement of material will be necessary. The CONTRACTOR shall blend the riprap surface smoothly with the surrounding area to eliminate protrusions or overfalls. Riprap may be either hand-placed or dumped, then forcibly compacted (pounded) in using the back of the excavator bucket to be embedded in the

streambank. Riprap used must be of sized according to INDOT standard specifications and extend at least 12 inches below normal water level to provide habitat for aquatic organisms in the voids.

Price: The price shall include all items listed in the “Description.” This includes all materials including sand/gravel, placement, shaping, grading, compacting, use of machinery, labor and all other items necessary to complete the work to the satisfaction of the Lake County Surveyor.

Method of Measurement and Payment: This work shall be measured for payment in SQUARE YARDS of FILTER FABRIC and TONS for INDOT REVETMENT RIPRAP. Earth excavation will not be measured and paid for in this pay item, but rather in EARTH EXCAVATION.

Measurement and Payment: This work shall be paid for at the contract unit price per SQUARE YARD of FILTER FABRIC and TON of INDOT REVETMENT RIPRAP installed.

INDOT REVETMENT RIPRAP	TON
FILTER FABRIC	SQ YD

SCOURLOK ENGINEERED BANK STABILIZATION

General Requirements: This work shall be performed as described in detail in the Indiana Drainage Handbook (Section 5.5, Practice 512). A copy of the latest version of the handbook is available online through the IDNR at <http://www.in.gov/dnr/water/4893.htm>.

Description: The work shall consist of the installation of a double tier anchored Scourlok Engineered Bank Stabilization wall. Conceptual details are shown on the plans for bidding purposes. The stabilization measure shall be installed per the manufacturer's specification.

Products: The stabilization measure shall be Scourlok as produced by Propex Operating Company, LLC or an approved equal.

Submittals: The Contractor shall submit shop drawings and product data for the proposed wall system. The shop drawings shall be signed and sealed by a Professional Engineer licensed in the State of Indiana. The construction details on Sheet 16, DET-1, of the plan set shall be used as a reference and not as the shop drawings.

Method of Measurement and Payment: This work shall be measured for payment in LINEAR FOOT for SCOURLOK ENGINEERED BANK STABILIZATION.

Measurement and Payment: This work shall be paid for at the contract unit price per LINEAR FOOT, which price shall include all materials including geotextile fabric, excavation, bank backfill, fill material, shaping, grading, compacting, use of machinery, labor and all other items necessary to complete the work.

REAR YARD DRAINAGE PIPE EXTENSIONS

General Requirements: This work shall be performed as described in detail in the Indiana Drainage Handbook (Section 5.10, Practice 1001). A copy of the latest version of the handbook is available online through the IDNR at <http://www.in.gov/dnr/water/4893.htm>.

Description: The work shall consist of the extension and/or replacement of rear yard drainage pipes which are impacted due to the proposed stabilization measures being implemented.

The rear yard drainage pipes were not surveyed; therefore, each residential home is estimated to have two rear yard drainage pipes discharging either subsurface water or rooftop runoff into Hart Ditch. Each residential parcel which is proposed to have its full streambank cleared and grubbed is anticipated to need two drainage pipes extended and/or replaced from the top of bank down to the start of the newly placed riprap. The extension of these drainage pipes to the start of the riprap is to avoid concentrated flow coming down the streambank and creating ruts which lead to erosion.

Proper measures should be made to anchor the pipe into the streambank, so it does not wash away during high flow/velocity scenarios. This may include partially embedding the drainage pipe into the streambank to provide cantilever support.

Products: The drainage pipes shall confirm to their original diameter at each rear yard and be made of high-density-polyethylene (HDPE).

Method of Measurement and Payment: This work shall be measured for payment per EACH for REAR YARD DRAINAGE PIPE EXTENSIONS.

Measurement and Payment: This work shall be paid for at the contract unit price per EACH, which price shall include all materials, use of machinery, labor and all other items necessary to complete the work.

EROSION CONTROL BLANKET

General Requirements: This work shall be performed as described in detail in the Indiana Drainage Handbook (Section 5.11, Practice 1104). A copy of the latest version of the handbook is available online through the IDNR at <http://www.in.gov/dnr/water/4893.htm>.

Description: This work shall consist of furnishing all labor, materials, tools and equipment necessary to place on the disturbed streambank or as directed by the Engineer.

The erosion control blanket shall be a machine-produced mat of 70% straw/30% coconut fiber matrix incorporated into a two-dimensional biodegradable jute mat. The netting shall consist of machine directional strands formed from two intertwined yarns with cross directional strands to form an approximate 0.50 x 1.0 inch (1.27 x 2.54 cm) mesh. The blanket shall be sewn together on 1.50 inch (3.81 cm) centers with degradable thread.

The mat shall meet Type 3.B specification requirements established by the Erosion Control Technology Council (ECTC) Specification and the U.S. Department of Transportation, Federal Highway Administration's (FHWA) *Standard Specifications For Construction of Roads and Bridges on Federal Highway Projects, FP-03 2003 Section 713.17*.

Installation staking patterns shall be clearly marked on the blankets with environmentally safe paint. All blankets shall be manufactured with a colored thread stitched along both outer edges (approximately 2-5 inches [5-12.5 cm] from the edge) as an overlap guide for adjacent blankets.

Location: Streambank.

Products: The erosion control blanket for the streambank shall be the Tensar-North American Green SC150BN, or equivalent. No monofilament netting may be used for this project.

The erosion control blanket shall be installed in accordance with the manufacture's recommendations. Where necessary, check slots shall be cut for any stumps or objects to remain that protrude from the ground surface.

Method of Measurement: This work will be measured in place and the area computed in SQUARE YARDS.

Basis of Payment: The work will be paid for at the contract unit price per SQUARE YARD for EROSION CONTROL BLANKET, which price shall constitute full compensation for all labor, materials and equipment necessary to complete the work as specified. Payment will be based on actual field measurements.

HART DITCH SLOPE MIX

General Requirements: This work shall be performed as described in the Indiana Drainage Handbook (Section 5.11, Practice 1102). A copy of the latest version of the Handbook is available online through the IDNR at <http://www.in.gov/dnr/water/4893.htm>.

Description: This work shall consist of the application of permanent seeding, temporary seeding as needed, plant residues, or other suitable material to disturbed soil surface areas on the streambank.

The permanent seed mix shall be placed on a mixture layer of mulch and topsoil. This layer should be a minimum of 2-inches thick and include oat or wheat straw, dry, free from weeds and foreign material, and topsoil.

Where areas are disturbed, but will not be planted within 14 days, annual ryegrass is to be installed immediately.

Location: Streambank.

Materials/Installation: This work shall be in accordance with Section 621 of the Indiana Department of Transportation Standard Specifications, current edition, except the seed mixture.

We recommend that the seed mix be purchased from a local supplier (within 150 miles of the site) to reduce the risk of invasive species being introduced. Seed mixtures shall be as follows:

Permanent Grasses

<u>Common Name</u>	<u>Botanic Name</u>	<u>Seeding Rate (PLS Oz/Acre)</u>
Big Bluestem	Andropogon gerardii	16.0
Side Oats Grama	Bouteloua curtipendula	16.0
Canada Wild Rye	Elymus canadensis	22.0
Switch Grass	Panicum virgatum	3.0
Little Blue Stem	Schizachyrium scoparium	32.0
Indian Grass	Sorghastrum nutans	<u>32.0</u>
		121.0

Forbs

<u>Common Name</u>	<u>Botanic Name</u>	<u>Seeding Rate (PLS Oz/Acre)</u>
Butterfly Weed	Asclepias tuberosa	2.0
New England Aster	Aster novae-angliae	2.0
Partridge Pea	Cassia fasciculata	3.0
Prairie Coreopsis	Coreopsis palmata	2.0
Purple Coneflower	Echinacea purpurea	4.0
Rough Blazing Star	Liatris aspera	1.0
Wild Bergamot	Monarda fistulosa	4.0
Prairie Cinquefoil	Potentilla arguta	1.0
Virginia Mountain Mint	Pycnanthemum virginianum	1.0
Yellow Coneflower	Ratibida pinnata	4.0
Black-Eyed Susan	Rudbeckia hirta	4.0
Early Goldenrod	Solidago juncea	1.0
Common Ironweed	Vernonia fasciculata	2.0
Common Milkweed	Asclepias Syriaca	<u>4.0</u>
		35.0

Temporary Cover**Common Name****Botanic Name****Seeding Rate (PLS Oz/Acre)**

Seed Oats

Avena sativa

1440.0

Annual Rye

Lolium multiflorum

480.0

1920.0

Price: The price shall include all items listed in the "Description", including seed mix, mulch, and topsoil, and all other items necessary to complete the work to the satisfaction of the Lake County Surveyor.

Method of Measurement and Payment: This work shall be measured in place at the contract unit price of ACRE.

Basis of Payment: This work shall be paid for at the contract unit price per ACRE for HART DITCH SLOPE MIX installed. Payment will be based on actual field measurements.

LIVE STAKES

General Requirements: This work shall be performed as described in the Indiana Drainage Handbook (Section 5.5, Practice 501). A copy of the latest version of the Handbook is available online through the IDNR at <http://www.in.gov/dnr/water/4893.htm>.

Description: This work shall consist of the installing live, rootable woody cuttings/stakes into the ground. LIVE STAKING can only be performed during plant (stake) dormancy. Dormancy is defined as that period after the leaves fall off and before buds open.

Location: On the streambank in locations designated on the Plan Set Details.

Materials/Installation: Live stakes shall consist of the following species:

<u>Common Name</u>	<u>Botanic Name</u>	<u>Quantity</u>
Buttonbush	Cephalanthus occidentalis	
Silky Dogwood	Cornus amomum	
Red Osier Dogwood	Cornus sericea	
Sandbar Willow	Salix interior	
Black Willow	Salix nigra	
Elderberry	Sambucus canadensis	
Nannyberry	Viburnum lentago	

The live stakes shall be no less than 0.5-inches in diameter, up to 3 inches in diameter, and 2 to 3 feet long. The materials may be collected or purchased.

The stakes must have side branches cleanly removed with the bark intact. The basal ends (bottom) should be cut at an angle or point for easy insertion into the soil. The top of the stake should be cut square (+/- 90 degrees) to identify the top, and to provide a solid striking surface. The stakes should be installed after 24 hours of soaking the basal/bottom end of the stake in water. Staking/planting shall occur, as soon as possible, after collection and soaking. If immediate planting cannot be performed, the bottom of the stake/plant shall be kept in water and the plant shall be refrigerated or kept in a cool and dark setting to prevent the stake/plant from breaking dormancy.

Stakes that begin sprouting before planting will be rejected.

Construction Requirements: The stakes shall be installed in the bank beginning towards the top of the riprap bulkhead and proceeding up the bank. The live stake shall be driven into the ground at right angles to the slope. The live stakes shall be installed approximately 6-feet apart using triangular spacing. Site variations may require slightly different spacing.

The buds on the stake should be oriented up. Drive the stake into the ground with preferably a dead blow hammer. A small sledgehammer is also acceptable. Four-fifths (4/5^{ths}) of the length of the live stake should be installed into the ground, and soil should be firmly packed around the stake after installation. Stakes should not be split during installation. Split stakes shall be removed and replaced.

- An iron bar or a stinger attached to a backhoe bucket can be used to make a pilot hole in firm or rocky soil.
- A gas-powered auger one inch in diameter is advantageous in stiff soils.

If a pilot hole is used, the void around the stake should be filled with soil, a slurry of mud or by compaction.

Stake installation may be delayed to allow stake installation during dormancy conditions.

Plant/Stake Guarantee: The contractor shall guarantee 50% survival of the stakes after one (1) year. If 50% is not achieved, the contractor shall replace all dead stakes. There shall be a 30% retainage for this pay item payable in full at the end of the one-year warranty period and meeting survival goals.

Price: The price shall include all items listed in the "Description" and all other items necessary to complete the work to the satisfaction of the Lake County Surveyor.

Method of Measurement and Payment: This work shall be measured for at the contract unit price of EACH.

Basis of Payment: This work shall be paid for at the contract unit price per EACH of LIVE STAKES installed. Payment will be based on actual field measurements.

CONTAINER TREE PLANTING

General Requirements: This work shall be performed as described in the Indiana Drainage Handbook (Section 5.5, Practice 501). A copy of the latest version of the Handbook is available online through the IDNR at <http://www.in.gov/dnr/water/4893.htm>.

Description: This work shall consist of installing 10-gallon container trees along the upper middle half of the streambank.

Location: On the upper half of the streambank in locations designated on the Plan Set Details.

Materials/Installation: Container trees shall consist of the following species:

<u>Common Name</u>	<u>Botanic Name</u>	<u>Quantity</u>
Red Maple	Acer rubrum	6
Hornbeam	Carpinus caroliniana	6
Blackgum	Nyssa sylvatica	6
Pin Oak	Quercus palustris	6
Swamp White Oak	Quercus bicolor	6
Chinkapin Oak	Quercus muehlenbergii	6
Bur Oak	Quercus macrocarpa	6
Shellbark Hickory	Carya laciniosa	6
American Sycamore	Platanus occidentalis	4

Plant Guarantee: The contractor shall guarantee 70% survival of the trees after one (1) year. If 70% is not achieved, the contractor shall replace all dead trees. There shall be a 30% retainage for this pay item payable in full at the end of the one-year warrantee period and meeting survival goals.

Price: The price shall include all items listed in the "Description", mulch, topsoil, Terra-Sorb, Agriform 21 fertilizer tablets, and all other items necessary to complete the work to the satisfaction of the Lake County Surveyor.

Method of Measurement and Payment: This work shall be measured for at the contract unit price of EACH.

Basis of Payment: This work shall be paid for at the contract unit price per EACH of CONTAINER TREE PLANTING installed. Payment will be based on actual field measurements.

CONTAINER SHRUB PLANTING

General Requirements: This work shall be performed as described in the Indiana Drainage Handbook (Section 5.5, Practice 501). A copy of the latest version of the Handbook is available online through the IDNR at <http://www.in.gov/dnr/water/4893.htm>.

Description: This work shall consist of installing 3-gallon container shrubs along the lower middle half of the streambank.

Location: On the streambank in locations designated on the Plan Set Details.

Materials/Installation: Container shrubs shall consist of the following species:

<u>Common Name</u>	<u>Botanic Name</u>	<u>Quantity</u>
Winterberry	Ilex verticillata	18
Ninebark	Physocarpus opulifolius	18
Chokeberry	Prunus virginiana	18
Meadowsweet	Spiraea alba	18
Black Chokeberry	Aronia melanocarpa	18
Spicebush	Lindera benzoin	18
American Cranberry	Viburnum trilobum	18
Speckled Alder	Alnus rugosa	18
Bladdernut	Staphylea trifolia	18

Plant Guarantee: The contractor shall guarantee 70% survival of the shrubs after one (1) year. If 70% is not achieved, the contractor shall replace all dead shrubs. There shall be a 30% retainage for this pay item payable in full at the end of the one-year warranty period and meeting survival goals.

Price: The price shall include all items listed in the "Description", mulch, topsoil, and all other items necessary to complete the work to the satisfaction of the Lake County Surveyor.

Method of Measurement and Payment: This work shall be measured for at the contract unit price of EACH.

Basis of Payment: This work shall be paid for at the contract unit price per EACH of CONTAINER SHRUB PLANTING installed. Payment will be based on actual field measurements.

FLOATING SILT CURTAIN

General Requirements: This work shall be performed as described in the Indiana Drainage Handbook (Section 5.1, Practice 105). A copy of the latest version of the Handbook is available online through the IDNR at <http://www.in.gov/dnr/water/4893.htm>.

Description: This work shall consist of the installing of a barrier of entrenched geotextile fabric stretched across and attached to supporting post used to intercept sediment - laden runoff from drainage areas of disturbed soil.

Location: Along the channel side of the embankment at the water surface.

Materials/Installation: This work shall be in accordance with Practice 105 as referenced above and with Section 205 of the Indiana Department of Transportation Standard Specifications, current edition.

The contractor will likely have to install, move, and re-install the silt curtain several times over the contract period. This technical specification covers acquisition, installation, moving, and re-installing the silt curtain as many times as necessary to cover the contract period. The technical specification provides no allowance for damage to the curtain requiring repair or replacement.

Price: The price shall include all items listed in the "Description." This includes the acquisition, installation, re-location, re-installation, removal, and disposal of this item as specified, including all materials, labor and equipment necessary to perform this work. Removal is required when the project is complete, and the disturbed areas have been stabilized. Removal is considered incidental to the cost of the item.

Method of Measurement and Payment: This work shall be measured in place for payment per LINEAR FOOT. This item will only be paid for if utilized by the CONTRACTOR.

Basis of Payment: This work shall be paid for at the contract unit price per LINEAR FOOT of FLOATING SILT CURTAIN installed. Payment will be based on actual field measurements.

SILT FENCE

General Requirements: This work shall be performed as described in the Indiana Drainage Handbook (Section 5.1, Practice 105). A copy of the latest version of the Handbook is available online through the IDNR at <http://www.in.gov/dnr/water/4893.htm>.

Description: Temporary barrier of entrenched geotextile fabric stretched across and attached to supporting post used to intercept sediment - laden runoff from drainage areas of disturbed soil. This item is to also include the use, if any, of rolled erosion control products such as silt worm.

Location: At the project limits, around construction staging areas, and around spoil piles.

Materials/Installation: This work shall be in accordance with Practice 105 as referenced above and with Section 205 of the Indiana Department of Transportation Standard Specifications, current edition.

Price: The price shall include all items listed in the "Description." This includes constructing and removing this item as specified, including all materials, labor and equipment necessary to perform this work. Removal of silt fence is required when the project is complete, and the disturbed areas have been stabilized and will be considered incidental to the cost of the item.

Method of Measurement and Payment: This work shall be measured in place and the length computed in FOOT. This item will only be paid for if utilized by the CONTRACTOR.

Basis of Payment: This work shall be paid for at the contract unit price per FOOT of SILT FENCE installed. Payment will be based on actual field measurements.

TEMPORARY STREAM DIVERSION & DEWATERING

Description: The work shall consist of the installation of a temporary stream diversion as needed to move stream flow through a project area to isolate construction activities from contact with stream flow and prevent impacts on water quality from the construction work, as well as properly treating and discharging sediment-laden water. This work shall be performed as described in detail in the Indiana Drainage Handbook (Section 5.1, Practice 104). A copy of the latest version of the handbook is available online through the IDNR at <http://www.in.gov/dnr/water/4893.htm>.

The scope of work shall include building and maintaining, **if necessary**, the temporary stream diversion (channel), flow barriers (dams), and temporary erosion and sediment controls, as well as removing all such temporary works after they have served their purposes and properly stabilizing the area. The scope of work shall also include dewatering activities for the construction area, as needed. The work shall be planned to minimize the length of time the temporary stream diversion will be used.

The CONTRACTOR shall furnish to the ENGINEER in writing, a plan for diverting stream flows, the removal of water from the work area before beginning the construction work, and the erosion control procedures using Best Management Practices for which the temporary stream diversion is required.

Dewatering of Project Area:

- Place watertight cofferdams in the waterway around the work area.
- Stream water should not be allowed to flow through work area until the area is completely stable, which includes the final shaping of the disturbed stream banks and stabilization of those banks with riprap, etc.

Inspection:

- Monitor the weather forecast and anticipate increases in stream water levels.

Maintenance:

- Fix leaks or otherwise stabilize cofferdams if water is flowing into work area.

Products: The CONTRACTOR shall be responsible for the choice of the product(s) and equipment as well as “means and methods” for the Site Dewatering Work to be performed subject to the review of the ENGINEER. All products and “means and methods” selected shall be adequate for the intended use/application. The ENGINEER’s review does not relieve the CONTRACTOR from compliance with the requirements of the Drawings and Specifications and the requirements of this special provision.

Best Management Practices are anticipated (but not limited to) to include:

Sump Pit

Pumps, Hoses, Etc.

Point Source Discharge Protection (Rip Rap with Vegetative Buffer, Etc)

Flocculation Logs

Flocculation Powder

Erosion Control Blanket – Jute Mat

Rock Checks
Ditch Checks
Geotextile Fabric
Dewatering Filter Bags
Dewatering Filter Pad

Removal and proper disposal of all BMP's and sediment associated with dewatering
Additional erosion and sediment control BMP's as per Engineer's direction.

General Requirements. The CONTRACTOR shall select the pumps he/she desires to use and the rate at which the pumps discharge, but adequate protection at the pump discharge shall be provided by the CONTRACTOR, subject to review by the Engineer. The CONTRACTOR shall ensure that downstream water quality shall not be impaired.

At all times during the excavation period and until completion and acceptance of the Work at Final Inspection, ample means and equipment shall be provided with which to remove promptly and dispose of properly all water (including ground water, river water, storm sewer water, storm runoff, and water generated from Contractor's activities) entering any excavation or any other parts of the Work.

Water pumped or drained from the work required for this Contract shall be disposed of in a safe and suitable manner without damage to adjacent waterways, adjacent property or streets or to other work under construction. Water shall be discharged with adequate erosion and sediment control protection of the surface at the point of discharge. No water shall be discharged into sanitary sewers. No water shall be discharged into storm sewers. Any and all damages caused by dewatering the work shall be promptly repaired by the Contractor. The Contractor is responsible for providing any and all labor, materials and equipment needed for TEMPORARY STREAM DIVERSION & DEWATERING in order to meet the scheduled completion of the project.

Method of Measurement and Payment: This work, if needed, will NOT be measured for payment separately but shall be included in the cost of the associated bank stabilization measures.

UPLAND RESTORATION

Description: This pay item shall be used for the restoration of all upland areas, which consists of Stewart Park and residential rear and side yards. Work is to be completed from one side of Hart Ditch, the west side, as there is an access point to the waterway at Stewart Park and at the driveway owned by the Sanitary District of Hammond located adjacent to 9507 White Oak Avenue. Written agreements shall be made by the CONTRACTOR with adjacent landowners for access to the site.

However, if upland areas on the east side are disturbed, this pay item shall be used to restore the limits of disturbance to pre-construction conditions.

This work shall include, but is not limited to, erosion control blanket, temporary seeding, 4-inches of topsoil, mulch, and turf grass seed mix. This item shall not include any potential fence replacement. If needed, fences removed shall be reinstalled and the work shall be considered incidental to the cost of the Project.

Price: The price shall include all items listed in the "Description."

Method of Measurement and Payment: This work shall be measured in place for payment in SQUARE YARDS. The ENGINEER has estimated an approximate disturbance area of 0.7-acres, or 3,450-square yards, will be the result from construction activities. Any additional disturbance area will not be measured for payment and shall be considered incidental to the Contract.

Basis of Payment: This work shall be paid for at the contract unit price per SQUARE YARD for UPLAND RESTORATION. Payment will be based on actual field measurements.

ITEMS ORDERED BY ENGINEER

Description: An allowance has been set aside as part of this contract for items ordered by the Engineer. The CONTRACTOR will include in his bid a unit price of \$25,000.00 for ITEMS ORDERED BY ENGINEER. Only additional work, not covered by existing pay items or indicated on the Plans or in the Project Specifications, as approved by the LAKE COUNTY SURVEYOR'S OFFICE and ENGINEER will be eligible for payment under the Allowance. This pay item would include the installation and removal of Construction Fence, if required by the Munster Parks and Recreation Department.

SUPPLEMENTAL BID PROPOSAL FORM (TO BE ATTACHED AND MADE PART OF FORM 96)
PROJECT: HART DITCH STABILIZATION IN MUNSTER - 2024

The undersigned, having familiarized himself/herself/themselves with local contract documents, comprised of the following:

1. Project documents for the project known as HART DITCH STABILIZATION IN MUNSTER - 2024, Hart Ditch/Plum Creek Watershed, Lake County, Indiana.

The undersigned has carefully inspected the site of the proposed work and can perform the various items of work for the unit prices/lump sums stipulated. All prices listed include any incidental work that may be necessary to complete the project in accordance with the provisions of the plans and specifications, as may be amended.

Item No.	Description and Calculation	Unit	Qty.	Unit Price	Total
1	CLEARING & GRUBBING 1.1-acre of Clearing and Grubbing. 0.2-acres of only Clearing. Additional 0.2-acres added to quantity to account for unforeseen debris.	AC	1.5		
2	EARTH EXCAVATION Assumed 0.5 CY per running foot of 'Full Bank Side Slope Stabilization.' 1,640 LF x 0.5 CY/LF = 820 CY Assumed 0.2 CY per running foot of "Tucked Boulder Toe Stabilization." 715 LF x 0.2 CY/LF = 140 CY Assumed 1.0 CY per running foot of "Scourlok Bank Stabilization." 110 LF x 1.0 CY/LF = 100 CY	CY	1,070		
3	INDOT REVETMENT RIPRAP Typical Section: (10' x 1.5') + (2' x 1.5') = 18 SF per running bank foot. 18 SF x 2,465 LF = 1,643 CY 1,643 CY x 1.5 TON/CY = 2,465 TON	TON	2,465		
4	FILTER FABRIC Riprap Typical Section: 10' + 1.5' + 1' = 12.5' per running bank foot. Area = 12.5' x 2,465 LF = 3,425 SY	SY	3,425		
5	SCOURLOK ENGINEERED BANK STABILIZATION	LF	110		
6	REAR YARD DRAINAGE PIPE EXTENSIONS	EACH	38		
7	EROSION CONTROL BLANKET Full Bank Side Slope Stabilization: 1,640 LF x 28' = 5,100 SY Tucked Boulder Toe Stabilization: 715 LF x 6' (estimated) = 475 SY	SY	5,575		
8	HART DITCH SLOPE MIX 5,575 SY + 175 SY (Above Scourlok Bank Stabilization) = 5,750 SY Additional 0.1-acre added to quantity.	AC	1.3		
9	LIVE STAKES	EACH	330		
10	CONTAINER TREE PLANTING	EACH	52		
11	CONTAINER SHRUB PLANTING	EACH	162		
12	FLOATING SILT CURTAIN	LF	2,465		
13	SILT FENCE Estimated length=300 LF for spoil piles and construction staging area(s)	LF	300		
14	UPLAND RESTORATION Estimated 2,500 SY for Stewart Park. Estimated 50 SY per residential lot (Full Bank Side Slope Stabilization & Scourlok Bank Stabilization) = 50 SY x 19 = 950 SY	SY	3,450		

SUPPLEMENTAL BID PROPOSAL FORM (TO BE ATTACHED AND MADE PART OF FORM 96)
PROJECT: HART DITCH STABILIZATION IN MUNSTER - 2024

Item No.	Description and Calculation	Unit	Qty.	Unit Price	Total
15	ITEMS ORDERED BY THE ENGINEER	LSUM	1	\$25,000	\$25,000
TOTAL BID PRICE	\$				

BIDDERS PROPOSAL FOR MAKING ENTIRE IMPROVEMENT:

\$ _____
(WORDS)

This proposal submitted this ____ day of _____, 2023.

Corporate Name: _____

Address: _____

By: _____

Title: _____

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SHEET 1 OF 19

GENERAL NOTES

1. ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE "INDIANA DRAINAGE HANDBOOK", REVISED 1999.
2. THE CONTRACTOR SHALL NOT PERFORM WORK ON ANY DAY BETWEEN THE HOURS OF 7:00 P.M. TO 7:00 A.M. OR ON SUNDAYS AND HOLIDAYS WITHOUT PRIOR APPROVAL FROM THE OWNER.
3. THERE SHALL BE NO STORAGE OF EQUIPMENT, MATERIALS, DEBRIS, SOIL, ETC. IN STREETS OR THE PUBLIC RIGHT-OF-WAY WITHOUT WRITTEN PERMISSION FROM THE OWNER.
4. THERE SHALL BE NO STORAGE OF EQUIPMENT, MATERIALS, DEBRIS, SOIL, ETC. WITHIN THE FLOODWAY OF HART DITCH.
5. COORDINATE THE LOCATIONS FOR ALL REQUIRED ACCESS WITH THE OWNER AND THE ENGINEER.
6. THE CONTRACTOR SHALL MINIMIZE INTERFERENCE WITH ADJOINING ROADS, STREETS, WALKS, AND OTHER ADJACENT OCCUPIED OR USED FACILITIES DURING CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL NOT CLOSE OR OBSTRUCT STREETS, WALKS, PARKING AREAS OR OTHER ADJACENT OCCUPIED OR USED FACILITIES WITHOUT PERMISSION OF THE OWNER AND OTHER AUTHORITIES HAVING JURISDICTION. THE CONTRACTOR SHALL PROTECT ROADS AND STREETS AT HEAVY EQUIPMENT CROSSINGS AS NEEDED TO PROTECT THE PAVEMENT. THE CONTRACTOR SHALL PROVIDE ROAD BARRIERS AND/OR A FLAG PERSON TO CONTROL TRAFFIC DURING ALL TIMES WHEN CONSTRUCTION EQUIPMENT IS ENTERING PUBLIC ROADS OR WHEN OTHERWISE WARRANTED.
7. THE CONTRACTOR SHALL BE RESPONSIBLE TO SECURE THE CONSTRUCTION SITE AGAINST UNAUTHORIZED ENTRANCE BY PERSONS AND VEHICLES OUTSIDE OF AND DURING WORKING HOURS. THE COST OF ANY ADDITIONAL SECURITY MEASURES DEEMED NECESSARY BY THE CONTRACTOR SHALL BE INCIDENTAL TO THE CONTRACT. IF THE CONTRACTOR FAILS TO MAINTAIN SECURITY OR SAFETY MEASURES AT THE PROJECT SITE, THE OWNER MAY AT THE EXPIRATION OF A PERIOD OF 48 HOURS, AFTER HAVING GIVEN THE CONTRACTOR WRITTEN NOTICE, PROCEED TO PROVIDE ADDITIONAL MEASURES AS DEEMED NECESSARY, AND THE COST THEREOF SHALL BE DEDUCTED FROM ANY COMPENSATION DUE, OR WHICH MAY BECOME DUE TO THE CONTRACTOR UNDER THIS CONTRACT.
8. THE CONTRACTOR SHALL ALLOW THE OWNER, ENGINEER, OWNER'S REPRESENTATIVE(S), AND OTHER CONTRACTORS WORKING FOR THE OWNER ACCESS TO THE SITE AT ALL TIMES.
9. IF THE CONTRACTOR FINDS A CONFLICT, ERROR OR DISCREPANCY IN THE CONSTRUCTION DOCUMENTS OR PLANS, CONTRACTOR SHALL REPORT IT IMMEDIATELY TO THE ENGINEER IN WRITING BEFORE PROCEEDING WITH THE WORK AFFECTED THEREBY AND SHALL OBTAIN A WRITTEN INTERPRETATION OR CLARIFICATION FROM THE ENGINEER. PROCEEDING WITH WORK WITHOUT THE ENGINEER'S RESPONSE IS DONE AT THE CONTRACTOR'S OWN RISK.
10. ALL WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LINES AND GRADES SHOWN ON THE PLANS. THE FULL RESPONSIBILITY FOR KEEPING ALIGNMENT AND GRADE SHALL REST UPON THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
11. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE TO THE OWNER FOR ALL ACTS AND OMISSIONS OF HIS SUBCONTRACTORS, SUPPLIERS AND OTHER PERSONS AND ORGANIZATIONS PERFORMING OR FURNISHING ANY OF THE WORK UNDER A DIRECT OR INDIRECT CONTRACT WITH THE CONTRACTOR JUST AS THE CONTRACTOR IS RESPONSIBLE FOR HIS OWN ACTS AND OMISSIONS. THE CONTRACTOR SHALL ASSUME SOLE OBLIGATION FOR THE PAYMENT OF ANY MONIES DUE TO ANY SUBCONTRACTOR, SUPPLIER, OR OTHER PERSON OR ORGANIZATION, EXCEPT AS MAY BE OTHERWISE REQUIRED BY LAWS AND REGULATIONS.
12. THE CONTRACTOR SHALL OBTAIN PERMISSION FROM THE NECESSARY STAKEHOLDERS FOR ALL WORK PERFORMED OUTSIDE OF THE OWNER'S RIGHT-OF-WAY.
13. THE CONTRACTOR SHALL STAKE OUT AND MARK LIMITS OF CONSTRUCTION SO THEY ARE CLEARLY VISIBLE. ALL CONSTRUCTION ACTIVITIES SHALL BE PERFORMED WITHIN THE DESIGNATED CONSTRUCTION LIMITS.
14. THE OWNER DOES NOT BEAR ANY RESPONSIBILITY FOR THE COST OF INJURIES TO THE CONTRACTOR, SUBCONTRACTOR, OR EMPLOYEES INJURED DURING THE COURSE OF THE CONTRACT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE TRANSPORT OF INJURED EMPLOYEES NEEDING MEDICAL OR OTHER ATTENTION.
15. THE CONTRACTOR SHALL AT ALL TIMES KEEP THE PREMISES FREE FROM ACCUMULATION OF WASTE MATERIALS OR RUBBISH CAUSED BY HIS/HER EMPLOYEES OR WORK AND PREVENT THE SPREAD OF DEBRIS DURING WINDY CONDITIONS. AT THE COMPLETION OF THE WORK, THE CONTRACTOR SHALL LEAVE THE PREMISES IN A NEAT, CLEAN AND ORDERLY FASHION.
16. THE CONTRACTOR SHALL POWER WASH ANY MECHANICAL EQUIPMENT OR VEHICLE TO BE USED ON THE JOB SITE TO REMOVE ALL MUD AND DEBRIS PRIOR TO UNLOADING ON THE SITE. NO OTHER VEHICLES/MACHINES SHALL BE PERMITTED IN THE PROJECT AREA. ALL OTHER EQUIPMENT OR PROJECT-RELATED VEHICLES MUST BE PARKED IN SPECIFIED PARKING AREAS AT LOCATIONS AGREED TO WITH THE OWNER.
17. THE CONTRACTOR SHALL IMMEDIATELY REMOVE MUD TRACKED BY VEHICLES ONTO THE ROADWAYS WHEN ROAD IS IN USE, OTHERWISE, BEFORE A CLOSED SECTION IS RETURNED TO SERVICE.
18. TEMPORARY TRAFFIC CONTROL IS THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER AND OWNER TO DETERMINE EXACT TRAFFIC CONTROL REQUIREMENTS. AT NO POINT SHALL A FULL ROADWAY CLOSURE BE ALLOWED.

19. EXISTING SIGNS WHICH ARE IN CONFLICT WITH PROPOSED IMPROVEMENTS SHALL BE REMOVED AND REINSTALLED UPON COMPLETION OF CONFLICTING IMPROVEMENTS IN ACCORDANCE WITH INDOT REQUIREMENTS. THIS WORK SHALL BE INCIDENTAL TO THE CONTRACT.
20. SHOP DRAWINGS OR PRODUCT CERTIFICATION INFORMATION OF ALL CONSTRUCTED OR SUPPLIED PROJECT MATERIALS SHALL BE SUBMITTED TO THE OWNER AND ENGINEER FOR REVIEW PRIOR TO IMPLEMENTATION OR INSTALLATION. SHOP DRAWINGS ARE REQUIRED FOR THE FOLLOWING PROJECT COMPONENTS: SCOURLOK ENGINEERING BANK WALL, PERMANENT AND TEMPORARY SEED MIXES, HYDROMULCH, AGGREGATES, RIPRAP, GEOTEXTILE, BORROW SOURCE (IF APPLICABLE).
21. UPON SUBSTANTIAL COMPLETION AND AGAIN AT FINAL COMPLETION OF CONSTRUCTION, PRIOR TO DEMOBILIZATION, THE CONTRACTOR SHALL ENSURE THAT ALL EXCESS CONSTRUCTION MATERIAL AND DEBRIS, INCLUDING SOIL, AGGREGATE, TRASH, TEMPORARY EROSION CONTROL MEASURES, AND MISCELLANEOUS CONSTRUCTION MATERIALS ARE REMOVED FROM THE PROJECT SITE AND DISPOSED OF PROPERLY. ALL DISTURBED AREAS, INCLUDING BUT NOT LIMITED TO LAWN AREAS, ROADS, SIDEWALKS, ETC., SHALL BE RESTORED TO THE SATISFACTION OF THE OWNER AND THE ENGINEER.
22. UPON COMPLETION OF THE WORK AND PRIOR TO ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL BE REQUIRED TO FURNISH THE ENGINEER WITH ONE SET OF MARKED-UP PRINTS SHOWING THE AS-BUILT LOCATION OF THE IMPROVEMENTS, FIELD CHANGES AND DETAILS NOT ON THE ORIGINAL DRAWINGS.
23. THE CONTRACTOR SHALL ATTEND A PRE-CONSTRUCTION MEETING AT THE PROJECT SITE PRIOR TO BEGINNING WORK.
24. THE CONTRACTOR SHALL SUBMIT A PROJECT SCHEDULE FOR REVIEW BY THE OWNER AND ENGINEER PRIOR TO BEGINNING WORK. SUBMIT REVISED SCHEDULES WITH EACH APPLICATION FOR PAYMENT.
25. THE CONTRACTOR SHALL TAKE PHOTOGRAPHS OF THE SITE AND CONSTRUCTION PRIOR TO AND THROUGHOUT THE PROGRESS OF WORK. PHOTOS SHALL BE SUBMITTED TO THE OWNER AND ENGINEER WITH EACH APPLICATION FOR PAYMENT. PHOTOS SHALL BE SUBMITTED ELECTRONICALLY IN JPEG FORM.
26. THE CONTRACTOR SHALL PROVIDE, MAINTAIN, AND PAY FOR TEMPORARY FACILITIES AND UTILITIES AS REQUIRED TO COMPLETE THE WORK. REMOVE TEMPORARY FACILITIES PRIOR TO THE APPLICATION FOR FINAL PAYMENT.
27. THE CONTRACTOR SHALL RESTORE EXISTING AND PERMANENT FACILITIES USED DURING CONSTRUCTION TO ORIGINAL CONDITION OR AS OTHERWISE SPECIFIED.
28. SUBSTITUTIONS WILL ONLY BE CONSIDERED WITHIN 15 DAYS AFTER THE DATE ESTABLISHED IN THE NOTICE TO PROCEED UNLESS A PRODUCT BECOMES UNAVAILABLE THROUGH NO FAULT OF THE CONTRACTOR. THE BURDEN OF PROOF FOR ESTABLISHING A SUBSTITUTE AS EQUAL OR SUPERIOR IS UPON THE CONTRACTOR.
29. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD PRIOR TO COMMENCING WORK. ADDITIONALLY, THE CONTRACTOR IS RESPONSIBLE FOR EXAMINING ALL SITE CONDITIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION AND IS TO COMPARE THE SITE CONDITIONS AS INDICATED ON THE DRAWINGS. THE ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES WHICH MAY EXIST, PRIOR TO PROCEEDING WITH THE WORK.
30. PAY ITEMS IN THE SUMMARY OF QUANTITIES HAVE BEEN ESTIMATED. IF, IN THE ENGINEER'S OPINION, THE WORK IS NOT REQUIRED, THE ITEM WILL BE DEDUCTED FROM THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED. ADDITIONALLY, IF BID PRICES ARE HIGHER THAN AVAILABLE FUNDING, PORTIONS OF THE CONTRACT WORK MAY BE ELIMINATED.
31. NO BURNING OR INCINERATION OF RUBBISH WILL BE PERMITTED ON SITE.

CONSTRUCTION NOTES

1. THE CONTRACTOR SHALL CLEARLY MARK ALL UNDERGROUND UTILITIES, CULVERTS AND UNDERGROUND DRAINS PRIOR TO CONSTRUCTION.
2. RESPONSIBILITY FOR THE REPAIR OF UTILITIES AND STRUCTURES WHEN BROKEN OR OTHERWISE DAMAGED SHALL BE BORNE BY THE CONTRACTOR. MATERIALS DAMAGED BY THE CONTRACTOR DURING HANDLING OR PLACEMENT OPERATIONS SHALL BE REPLACED IN-KIND BY THE CONTRACTOR AT THE CONTRACTOR'S SOLE EXPENSE. SUCH DAMAGED MATERIALS SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR.
3. THE CONTRACTOR SHALL DEPLOY SUITABLE EQUIPMENT FOR EXCAVATION, COMPACTION AND GRADING OF SOIL TO CONSTRUCT THE WORK. THE CONTRACTOR SHALL PERFORM EXCAVATION TO THE LINES AND GRADES SHOWN ON THE PLANS.
4. POSITIVE DRAINAGE SHALL BE PROVIDED AND MAINTAINED AT ALL TIMES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH DEWATERING OF ANY EXCAVATION IN ORDER TO PROVIDE POSITIVE DRAINAGE AND ANY COST ASSOCIATED WITH THE DISPOSAL OF SUCH WATER.
5. PROVIDE SHEETING, SHORING, BRACING, OR OTHER PROTECTION MEASURES AS REQUIRED TO MAINTAIN SAFE EXCAVATIONS PER OSHA. THE CONTRACTOR IS RESPONSIBLE FOR DESIGN, INSTALLATION AND REMOVAL OF ALL EXCAVATION SUPPORT SYSTEMS.
6. THE EXCAVATION AND WORK AREA SHALL BE PROPERLY DRAINED AT ALL TIMES DURING CONSTRUCTION. ALL WET, LOOSE, FROZEN OR OTHER UNSUITABLE MATERIAL SHALL BE REMOVED PRIOR TO PLACEMENT OF RIPRAP, CONCRETE OR COMPACTED BACKFILL. THE COST OF ANY PUMPING REQUIRED IS INCIDENTAL TO THE CONTRACT.

7. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DEWATER AND DIVERT FLOW AS NEEDED DURING THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS IN ORDER TO KEEP THE CONSTRUCTION AREAS FREE OF WATER. THE METHOD OF DEWATERING AND WATER DIVERSION SHALL BE SUBJECT TO APPROVAL OF THE ENGINEER AND SHALL BE INCIDENTAL TO THE CONTRACT.
8. WHENEVER DURING CONSTRUCTION OPERATIONS ANY LOOSE MATERIAL IS DEPOSITED IN THE FLOW LINE OF DRAINAGE STRUCTURES SUCH THAT THE NATURAL FLOW OF WATER IS OBSTRUCTED, IT SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY, AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL UTILITY STRUCTURES SHALL BE FREE FROM DIRT AND DEBRIS. THE WORK SPECIFIED ABOVE WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE CONTRACT.
9. WHEN EXISTING DRAINAGE FACILITIES ARE DISTURBED, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY OUTLETS AND CONNECTIONS FOR ALL PRIVATE OR PUBLIC DRAINS, SEWERS OR CATCH BASINS. HE SHALL PROVIDE FACILITIES TO TAKE IN ALL STORM WATER WHICH WILL BE RECEIVED BY THESE DRAINS AND SEWERS, AND DISCHARGE THE SAME, HE SHALL PROVIDE AND MAINTAIN AN EFFICIENT PUMPING PLANT, IF NECESSARY, AND A TEMPORARY OUTLET, AND BE PREPARED AT ALL TIMES TO DISPOSE OF THE WATER RECEIVED FROM THESE TEMPORARY CONNECTIONS UNTIL SUCH TIME AS THE PERMANENT CONNECTIONS WITH SEWERS ARE BUILT AND IN SERVICE. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE CONTRACT.
10. USE OF CCDD FILL OPERATIONS: IF THE CONTRACTOR CHOOSES TO DISPOSE OF UNCONTAMINATED SOIL OR UNCONTAMINATED SOIL MIXED WITH CLEAN CONSTRUCTION AND DEMOLITION DEBRIS (CCDD) AT A CCDD FILL OPERATION, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PERFORM ALL NECESSARY FIELD AND LABORATORY ANALYSIS AND TO OBTAIN THE LICENSED PROFESSIONAL ENGINEER'S CERTIFICATION REQUIRED TO USE THE SITE. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO EARTH EXCAVATION, STRUCTURE EXCAVATION OR RELATED EXCAVATION OR REMOVAL ITEM, AND NO ADDITIONAL COMPENSATION WILL BE PROVIDED
11. ALL NON-NATIVE FILL MATERIAL SHALL BE APPROVED BY THE ENGINEER PRIOR TO PLACEMENT.
12. ON-SITE EXCAVATED SOILS, EXCEPT TOPSOIL, MAY BE CONSIDERED SUITABLE FOR FILL PROVIDED PROPER MOISTURE CONTENT IS MAINTAINED DURING PLACEMENT AND SUBJECT TO INSPECTION AND APPROVAL BY THE ENGINEER. A PORTION OF THE EXCAVATED SOILS MAY EXHIBIT NATURAL MOISTURE CONTENT ABOVE OPTIMUM MOISTURE. THESE SOILS MAY REQUIRE AIR-DRYING AND/OR CHEMICAL MODIFICATION PRIOR TO PLACEMENT.
13. TOPSOIL IS NOT SUITABLE FOR USE AS FILL MATERIAL.
14. UNIFORMLY GRADE AREAS TO CREATE A SMOOTH SURFACE TO THE SECTIONS, LINES AND ELEVATIONS INDICATED ON THE DRAWINGS. PROVIDE A SMOOTH TRANSITION BETWEEN EXISTING GRADES AND NEW GRADES.
15. TOPSOIL SHALL BE PLACED IN ONE LOOSE LIFT IN ALL AREAS WHERE THE UNDERLYING SOILS WILL NOT SUPPORT VEGETATIVE GROWTH. IF ADEQUATE TOPSOIL VOLUMES ARE NOT AVAILABLE FROM ON-SITE SOURCES, THE CONTRACTOR SHALL AMEND AVAILABLE SOIL TO PRODUCE A SUITABLE GROWTH MEDIUM OR IMPORT TOPSOIL FROM OFFSITE. THE FINAL SURFACE SHALL BE GRADED SMOOTH TO FINAL DESIGN GRADES. ALL SIGNIFICANT VARIATIONS, INCLUDING VEHICLE TIRE OR EQUIPMENT TRACK RUTS, SHALL BE SMOOTHED OUT WITH A GRADER BOX OR OTHER METHOD. FINAL GRADING PERFORMED BY DOZERS SHALL BE DONE IN A MANNER SUCH THAT THE TRACK CLEATS ARE ORIENTED PARALLEL TO THE CONTOURS TO MINIMIZE RUNOFF VELOCITY DOWN THE SLOPE AND TO HELP MAINTAIN MOISTURE IN THE TOPSOIL.
16. ALL DETAILS AND SECTIONS SHOWN ON THE DRAWINGS ARE TYPICAL AND SHALL BE USED WHEREVER A SIMILAR CONDITION OCCURS UNLESS NOTED OTHERWISE.
17. NO PLANS SHALL BE USED FOR CONSTRUCTION UNLESS SPECIFICALLY MARKED "FOR CONSTRUCTION".
18. DO NOT SCALE DIMENSIONS FOR CONSTRUCTION. SCALE, IF SHOWN, APPLIES ONLY TO FULL SIZE DRAWINGS (22" x 34", ANSI D SIZE PAPER).
19. ACCESS SHALL BE FROM ONE SIDE OF THE DITCH. WEST BANK (LEFT BANK) SHALL BE THE SIDE USED FOR DITCH ACCESS.

DEMOLITION NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL FACILITIES DURING THE ENTIRE PERIOD OF SERVICE. ANY DAMAGES TO THE EXISTING FACILITIES, ROAD, OR OTHER PROPERTY CAUSED BY THE CONTRACTOR OR SUBCONTRACTOR SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE AND IN A MANNER AND SCHEDULE APPROVED BY THE OWNER AND ENGINEER.
2. ALL TRASH/DEBRIS WITHIN EXCAVATOR REACH FROM THE BANK SHALL BE REMOVED FROM THE CHANNEL.
3. ITEMS NOTED OR OTHERWISE IDENTIFIED TO BE SALVAGED (IF ANY) SHALL BE RETURNED TO THE OWNER IN THE ORIGINAL CONDITION.

4. NOTIFY THE ENGINEER IMMEDIATELY UPON THE DISCOVERY OF ANY HAZARDOUS MATERIALS.
5. PROTECT AND MAINTAIN SURVEY BENCHMARKS FROM DISTURBANCE.
6. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL SECTION OR SUBSECTION MONUMENTS OR PROPERTY OR REFERENCE MARKERS UNTIL THE OWNER, HIS AGENT OR AN AUTHORIZED SURVEYOR HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATIONS,
7. PROTECT EXISTING VEGETATION, STRUCTURES, UTILITIES AND OTHER ITEMS TO REMAIN.
8. ALL DEMOLITION ITEMS SHALL BE REMOVED FROM THE SITE AT THE CONTRACTOR'S EXPENSE AND DISPOSED OF IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS.
9. REGULARLY CLEAN UP AND REMOVE DEMOLISHED MATERIALS FROM THE SITE SO THAT THEY DO NOT ACCUMULATE.

PERMITTING NOTES

1. THE OWNER WILL OBTAIN THE FOLLOWING PERMITS FOR THIS PROJECT:

A) IDEM SECTION 401 WATER QUALITY CERTIFICATION

B) USACE NWP 13

C) IDNR FLOODWAY CONSTRUCTION PERMIT.

COPIES OF ALL PERMITS OBTAINED WILL BE PROVIDED TO THE CONTRACTOR BY THE OWNER. THE CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH ALL PERMIT CONDITIONS AND REQUIREMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL OTHER PERMITS AND/OR LICENSES AS REQUIRED BY LAW/ORDINANCE OR REGULATION.
2. DO NOT WORK IN THE WATERWAY FROM APRIL 1 THROUGH JUNE 30 WITHOUT PRIOR WRITTEN APPROVAL FROM THE INDIANA DEPARTMENT OF NATURAL RESOURCES DIVISION OF FISH AND WILDLIFE.
3. DO NOT CUT ANY TREES SUITABLE FOR INDIANA BAT ROUSTING (GREATER THAN 3-INCHES DBH, LIVING OR DEAD, WITH LOOSE HANSING BARK) FROM APRIL 1 TO SEPTEMBER 30.
4. ACCESS TO THE DITCH SHALL ONLY BE FROM ONE SIDE TO MINIMIZE THE AMOUNT OF CLEARING NEEDED. ACCESS SHALL BE FROM THE WEST BANK.

UTILITY NOTES

1. THE CONTRACTOR SHALL CALL THE INDIANA UNDERGROUND PLANT PROTECTION SERVICE ("INDIANA 811) BY DIALING 811 AT LEAST 48 HOURS PRIOR TO COMMENCEMENT OF LAND-DISTURBING ACTIVITIES TO SCHEDULE A UTILITY LOCATE. ANY INFORMATION CONCERNING TYPE OR LOCATION OF UNDERGROUND AND OTHER UTILITIES SHOWN IN THESE DOCUMENTS IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL EXISTING UTILITIES AND TO REPORT ANY DISCREPANCIES OR OMISSIONS WITH THE EXISTING UTILITIES SHOWN ON THE PLANS TO THE ENGINEER IMMEDIATELY.
2. THE CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES, WHETHER SHOWN ON THESE PLANS OR NOT, AS REQUIRED TO PREVENT DAMAGE.
3. ALL UTILITIES MUST BE FULLY OPERATIONAL AND ACCESSIBLE THROUGHOUT THE PROJECT UNLESS OTHERWISE COORDINATED WITH AND APPROVED BY THE OWNER, ENGINEER, AND UTILITY COMPANY AT LEAST TWO DAYS IN ADVANCE OF THE PROPOSED INTERRUPTION.
4. ANY AND ALL DAMAGE TO EXISTING UTILITIES MUST BE REPAIRED IN KIND AT THE CONTRACTOR'S EXPENSE.
5. COORDINATION OF ALL UTILITY WORK INVOLVED IN THE CONSTRUCTION AREA WILL BE DISCUSSED AT THE PRE-CONSTRUCTION CONFERENCE.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE OWNERS OF ALL EXISTING FACILITIES SO THAT THE UTILITIES AND THEIR APPURTENANCES MAY BE LOCATED AND ADJUSTED OR MOVED, IF NECESSARY, PRIOR TO THE START OF CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL COOPERATE WITH ALL UTILITY OWNERS AS PROVIDED FOR IN THE STANDARD SPECIFICATIONS.
7. UTILITY CONTACT INFORMATION:

INDIANA UNDERGROUND PLANT PROTECTION SERVICE, INC.
800-382-5544

TOWN OF MUNSTER, DEPARTMENT OF PUBLIC WORKS
DAVE WHITE
219-836-6978

NIPSCO GAS & ELECTRIC
utilitycoordination@nisource.com
DEAN GARRETT
DAGarret@nisource.com
219-218-2506

AT&T RESIDENTIAL PHONE & FIBER
DENNIS PROTEGA
219-662-4689
dp7986@att.com

AT&T HIGH TRANSMISSION FIBER:
KIM HOLLAND
312-925-7698
kh2194@att.com

SURF WIRELESS
MIKE SAMMARTANO
msammartano@surfinternet.com

COMCAST
LARRY SMITH
Larry.Smith3@cable.comcast.com
574-320-8203



CHRISTOPHER B. BURKE ENGINEERING, LTD.
9575 W. Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500



LAKE COUNTY
SURVEYOR'S OFFICE

CLIENT:

					DSGN.	JLW	
					DWN.	EAT	
					CHKD.	TTB	
					SCALE:	2'	
					PLOT DATE:	11/20/2023	
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GENERAL NOTES

PROJ. • 930169.02023F

DATE: 11/20/2023

SHEET 2 OF 19

DRAWING NO.

NOT-1

EROSION AND SEDIMENT CONTROL NOTES

1.

THE TEMPORARY EROSION CONTROL SYSTEMS INSTALLED BY THE CONTRACTOR SHALL BE PROPERLY MAINTAINED AS INDICATED ON THE PLANS OR AS DIRECTED BY THE OWNER OR ENGINEER TO CONTROL EROSION AND SILTATION AT ALL TIMES DURING THE LIFE OF THE CONTRACT. THIS WORK SHALL INCLUDE REPAIR OF THE VARIOUS SYSTEMS, REMOVAL OF TRAPPED SEDIMENT, AND CLEANING OR REPLACEMENT OF EROSION CONTROL MEASURES. ACCUMULATED SILT IN THE WORK AREA SHALL BE REMOVED FROM THE SITE AS AN INCIDENTAL COST TO THE PROJECT OR SHALL BE USED ON-SITE IF APPROVED BY THE OWNER. ANY ADDITIONAL MATERIALS AND WORK REQUIRED BY THE ENGINEER TO CONTROL EROSION SHALL BE MEASURED AND PAID FOR AS SPECIFIED. IF THE CONTRACTOR FAILS TO MAINTAIN THE EROSION CONTROL SYSTEMS AS DIRECTED BY THE ENGINEER, THE OWNER MAY AT THE EXPIRATION OF 48 HOURS AFTER HAVING GIVEN THE CONTRACTOR WRITTEN NOTICE, PROCEED TO MAINTAIN THE SYSTEMS AS DEEMED NECESSARY, AND THE COST THEREOF SHALL BE DEDUCTED FROM ANY COMPENSATION DUE TO THE CONTRACTOR.
2.

THE CONTRACTOR SHALL INSTALL TEMPORARY EROSION CONTROL MEASURES AS INDICATED IN THESE PLANS PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITIES. THESE MEASURES INCLUDE SILT FENCE, SILT CURTAIN, TEMPORARY SEEDING AND MULCHING.
3.

ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED AS CONDITIONS WARRANT.
4.

THE CONTRACTOR SHALL REPAIR EROSION DAMAGE TO THE FINISHED SURFACES AT NO ADDITIONAL COSTS TO THE OWNER.
5.

THE CONTRACTOR SHALL PERFORM POST-CONSTRUCTION MAINTENANCE ON NEW VEGETATION FOR A PERIOD OF ONE YEAR FROM SUBSTANTIAL COMPLETION. IF THE CONDITION OF THE VEGETATION IN NOT ACCEPTABLE AT THE END OF THE ONE YEAR PERIOD, THE CONTRACTOR SHALL CONTINUE MAINTENANCE AND/OR RE-SEED UNTIL CONDITIONS ARE ACCEPTABLE TO THE OWNER.
6.

ALL EROSION CONTROL BLANKET TO BE PLACED SHALL BE 100% BIODEGRADABLE

RIPARIAN HABITAT NOTES

1.

IMPACT TO NON-WETLAND FOREST OF ONE (1) ACRE OR MORE SHOULD BE MITIGATED AT A MINIMUM 2:1 RATIO. APPROXIMATELY 26 TREES 5" DBH OR GREATER ARE PROPOSED TO BE CUT DOWN TO COMPLETE THE PROPOSED WORK. THEREFORE, 52 TREES ARE PROPOSED TO BE PLANTED, ALONG WITH APPROXIMATELY 162 SHRUBS AND APPROXIMATELY 330 LIVE STAKES.
2.

THE LOCATION OF TREES ARE APPROXIMATE AND SHALL ONLY BE USED AS A REFERENCE. THE STREAMBANK CONTAINS A SIGNIFICANT AMOUNT OF SMALL DIAMETER TREES AND OTHER WOODY VEGETATION.

NOTE:
CONTRACTOR TO PROVIDE DEWATERING PLAN, IF NEEDED TO THE LCSO AND CBBEL FOR REVIEW PRIOR TO STARTING WORK.

WORK WITHIN WATERWAY MUST MEET THE FOLLOWING STANDARD

1.

WORK SHALL MEET THE REQUIREMENTS AND THE CONDITIONS OF THE IDNR-DOW PERMIT, THE CORPS OF ENGINEERS PERMIT AND IDEM WATER QUALITY CERTIFICATION.
2.

WORK WITHIN THE WATERWAY MUST BE TIMED TO TAKE PLACE DURING LOW OR N-LOW CONDITIONS. LOW FLOW CONDITIONS ARE FLOWS AT BELOW NORMAL WATER ELEVATION.
3.

MAIN CHANNEL FLOW SHALL BE ISOLATED FROM THE IN-STREAM WORK AREA. THE CONTRACTOR SHALL SUBMIT THEIR INSTREAM PLAN FOR REVIEW AND APPROVAL TO THE ENGINEER AT LEAST 1-WEEK PRIOR TO COMMENCEMENT OF CONSTRUCTION.
4.

A WEIGHTED SILT CURTAIN SHALL BE INSTALLED TO ISOLATE THE WORK AREA FROM MAINSTREAM FLOW.
5.

COFFERDAMS, IF INSTALLED, SHALL BE CONSTRUCTED OF NON-ERODIBLE MATERIALS, I.E. STEEL SHEETS,
6.

AQUA BARRIERS, RIPRAP, PLASTIC SHEETING, SANDBAGS, BULK BAGS, GEOTEXTILE FABRIC, ETC., OR OTHER APPROVED MATERIALS. EARTHEN/LOAMY COFFERDAMS ARE NOT ALLOWED.

IDNR-DOW PROJECT SPECIFIC PERMIT CONDITIONS

1.

REVEGETATE ALL BARE DISTURBED AREAS, EXCEPT FOR LAND THAT WILL BE USED FOR CROP PRODUCTION IN THE NEXT GROWING SEASON, WITH A MIXTURE OF GRASSES (EXCLUDING ALL VARIETIES OF TALL FESCUE) AND LEGUMES AS SOON AS POSSIBLE UPON COMPLETION. LOW ENDOPHYTE TALL FESCUE MAY BE USED IN THE DITCH BOTTOM AND SIDE SLOPES ONLY.
2.

DO NOT WORK IN THE WATERWAY FROM APRIL 1 THROUGH JUNE 30 WITHOUT THE PRIOR WRITTEN APPROVAL OF THE DIVISION OF FISH AND WILDLIFE'S ENVIRONMENTAL UNIT.
3.

DO NOT CUT ANY TREES SUITABLE FOR INDIANA BAT AND NORTHERN LONG EARED BAT ROOSTING (GREATER THAN 3 INCHES IN DIAMETER LIVING OR DEAD, WITH LOOSE HANGING BARK, OR WITH CRACKS CREVICES OR CAVITIES) FROM APRIL 1ST THROUGH SEPTEMBER 30TH.
4.

DO NOT EXCAVATE OR PLACE SPOIL IN ANY RIPARIAN WETLAND.
5.

STABILIZE BANKS AS WORK PROGRESSES SO THAT NO MORE THAN 200 LINEAL FEET ARE LEFT DISTURBED AT THE COMPLETION THE WORKDAY.
6.

REVEGETATE ALL SPOIL MATERIALS DEPOSITED IN AREAS NOT USED FOR CROP PRODUCTION.

7.

A REPRESENTATIVE OF THE SURVEYOR'S OFFICE OR THEIR CONTRACTOR SHALL INSPECT EROSION AND SEDIMENT CONTROL PRACTICES DAILY AND REPAIR AS NECESSARY UNTIL ALL CONSTRUCTION IS COMPLETE AND DISTURBED AREAS ARE PERMANENTLY STABILIZED.
8.

ALL WORK MUST CONFORM WITH THE EXISTING BANK AT THE UPSTREAM AND DOWNSTREAM LIMITS OF THE PROJECT SITE.
9.

EXCEPT FOR TREES CABLED IN-PLACE FOR BACK PROTECTION, DO NOT LEAVE FELLED TREES, BRUSH, OR OTHER DEBRIS IN THE FLOODWAY
10.

PLACE ALL EXCAVATED MATERIALS AT LEAST 10 FEET LANDWARD OF THE TOP OF THE DITCH BANK; SPREAD ALL EXCAVATED MATERIALS EVENLY TO A THICKNESS NOT TO EXCEED 12 INCHES AND SLOPE LANDWARD FROM THE CHANNEL OR COMPLETELY REMOVE FROM THE FLOODWAY.
11.

DO NOT USE BROKEN CONCRETE
12.

USE RIPRAP WITH A MINIMUM DIAMETER OF 6 INCHES BE BELOW THE NORMAL WATER LEVEL TO PROVIDE HABITAT FOR AQUATIC ORGANISMS.
13.

STAY AT LEAST 50 FEET AWAY FROM THE BRIDGES.

DNR PROJECT GENERAL PERMIT CONDITIONS

1.

ANY MODIFICATIONS OR ADDITIONAL CONSTRUCTION BEYOND WHAT WAS SHOWN ON PLANS RECEIVED AT THE DIVISION OF WATER SHALL REQUIRE AN ADDITIONAL REVIEW AND APPROVAL FROM THE DEPARTMENT OF NATURAL RESOURCES
2.

THIS PERMIT MUST BE POSTED AND MAINTAINED AT THE PROJECT SITE UNTIL THE PROJECT IS COMPLETED.
3.

THIS PERMIT SHALL NOT BE ASSIGNED OR TRANSFERRED WITHOUT THE PRIOR WRITTEN APPROVAL OF THE DEPARTMENT OF NATURAL RESOURCES.
4.

IF ANY PREHISTORIC OR HISTORIC ARCHAEOLOGICAL ARTIFACTS OR HUMAN REMAINS ARE UNCOVERED DURING CONSTRUCTION, DEMOLITION, OR EARTHMOVING ACTIVITIES, STATE LAW (IC 14-21-1-27 AND 29) REQUIRES THAT THE DISCOVERY MUST BE DEPARTMENT OF NATURAL RESOURCES WITHIN TWO (2) BUSINESS DAYS.
5.

THIS PERMIT MAY BE REVOKED BY THE DEPARTMENT OF NATURAL RESOURCES FOR VIOLATION OF ANY CONDITION OR APPLICABLE STATUTE OR RULE.
6.

THE DEPARTMENT OF NATURAL RESOURCES SHALL HAVE THE RIGHT TO ENTER UPON THE SITE OF THE PERMITTED ACTIVITY FOR THE PURPOSE OF INSPECTING THE WORK AUTHORIZED UNDER THIS PERMIT.



CHRISTOPHER B. BURKE ENGINEERING, LTD.
9575 W. Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

CLIENT:



**LAKE COUNTY
SURVEYOR'S OFFICE**

				DSGN.	JLW	
				DWN.	EAT	
				CHKD.	TTB	
				SCALE:	N.T.S.	
				PLOT DATE:	11/20/2023	
				CAD USER:	mgoldenberg	
NO.	DATE	NATURE OF REVISION		CHKD.	MODEL:	Default
FILE NAME	N:\LCSO IN\930169.02023F\Water\Plan Set\03_930169.02023F_NOT_2.dgn					

TITLE:

GENERAL NOTES

PROJ. • 930169.02023F

DATE: 11/20/2023

SHEET 3 OF 19

DRAWING NO.

NOT-2



MATCHLINE SEE DWG EX-2

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Rosemont, Illinois 60018
(847) 823-0500

CLIENT:



**LAKE COUNTY
SURVEYOR'S OFFICE**

NO.	DATE	NATURE OF REVISION	CHKD.	MODEL
1	11/20/2023	INITIAL DESIGN	JLW	EAT
2	11/20/2023	REVISION	TTB	
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100	11/20/2023	REVISION		

TITLE:

**EXISTING CONDITIONS
AND REMOVAL PLAN**

NOTE:
WATER LEVEL WAS AT NORMAL BASE FLOW CONDITION IN THIS
AERIAL PHOTOGRAPHY. EXISTING CONTOURS NEAR WATER SURFACE
HAVE BEEN CLIPPED. 2018 LIDAR DATA WAS USED TO GENERATE
THE CONTOURS. EXISTING CONTOURS SHOULD ONLY BE USED AS
A GUIDE/REFERENCE.
AERIAL DATE: MARCH 21, 2022.

PROJ. • 930169.02023F

DATE: 11/20/2023

SHEET 4 OF 19

DRAWING NO.

EX-1

MATCHLINE SEE DWG EX-1



MATCHLINE SEE DWG EX-3

LEGEND

- CLEARING
- CLEARING AND GRUBBING
- STATIONING
- EXISTING CONTOUR
- EXISTING STORM SEWER OUTFALL
- EXISTING FENCE
- EXISTING RETAINING WALL
- EXISTING TREE
- EXISTING TREE TO BE REMOVED
- UTILITY POLE AND OVERHEAD WIRE
- PARCEL BOUNDARY

NOTE: WATER LEVEL WAS AT NORMAL BASE FLOW CONDITION IN THIS AERIAL PHOTOGRAPHY. EXISTING CONTOURS NEAR WATER SURFACE HAVE BEEN CLIPPED. 2018 LIDAR DATA WAS USED TO GENERATE THE CONTOURS. EXISTING CONTOURS SHOULD ONLY BE USED AS A GUIDE/REFERENCE.

AERIAL DATE: MARCH 21, 2022.

CHRISTOPHER B. BURKE ENGINEERING, LTD.
9575 W. Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

CLIENT:



**LAKE COUNTY
SURVEYOR'S OFFICE**

NO.	DATE	NATURE OF REVISION	CHKD.	MODEL
1	11/20/2023	PLANNING	JLW	EAT
2	11/20/2023	DESIGN	JLW	TTB
3	11/20/2023	SCALE: 40'	JLW	TTB
4	11/20/2023	PLOT DATE: 11/20/2023	JLW	TTB
5	11/20/2023	CAD USER: mgoldenberg	JLW	TTB
6	11/20/2023	FILE NAME: N:\LCSO IN\930169.02023F\Water\Plan Set\05_930169.02023F_EXL2.dgn	JLW	TTB

TITLE:

**EXISTING CONDITIONS
AND REMOVAL PLAN**

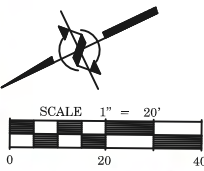
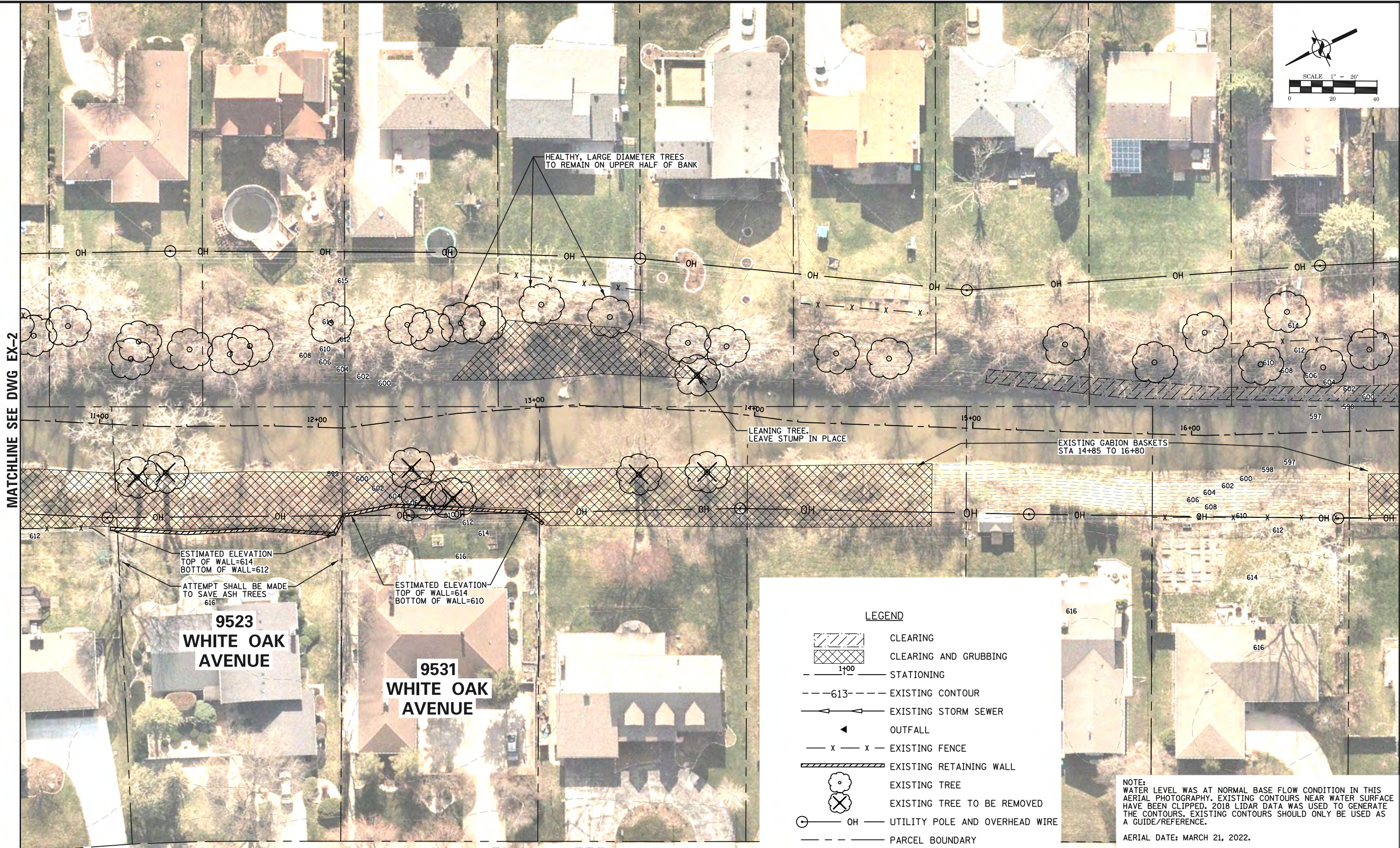
PROJ. • 930169.02023F

DATE: 11/20/2023

SHEET 5 OF 19

DRAWING NO.

EX-2



MATCHLINE SEE DWG EX-2

MATCHLINE SEE DWG EX-4

LEGEND

- CLEARING
- CLEARING AND GRUBBING
- STATIONING
- EXISTING CONTOUR
- EXISTING STORM SEWER
- OUTFALL
- EXISTING FENCE
- EXISTING RETAINING WALL
- EXISTING TREE
- EXISTING TREE TO BE REMOVED
- OH — UTILITY POLE AND OVERHEAD WIRE
- PARCEL BOUNDARY

NOTE: WATER LEVEL WAS AT NORMAL BASE FLOW CONDITION IN THIS AERIAL PHOTOGRAPHY. EXISTING CONTOURS NEAR WATER SURFACE HAVE BEEN CLIPPED. 2018 LIDAR DATA WAS USED TO GENERATE THE CONTOURS. EXISTING CONTOURS SHOULD ONLY BE USED AS A GUIDE/REFERENCE.
AERIAL DATE: MARCH 21, 2022.

CHRISTOPHER B. BURKE ENGINEERING, LTD.
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Rosemont, Illinois 60018
(847) 823-0500

CLIENT:



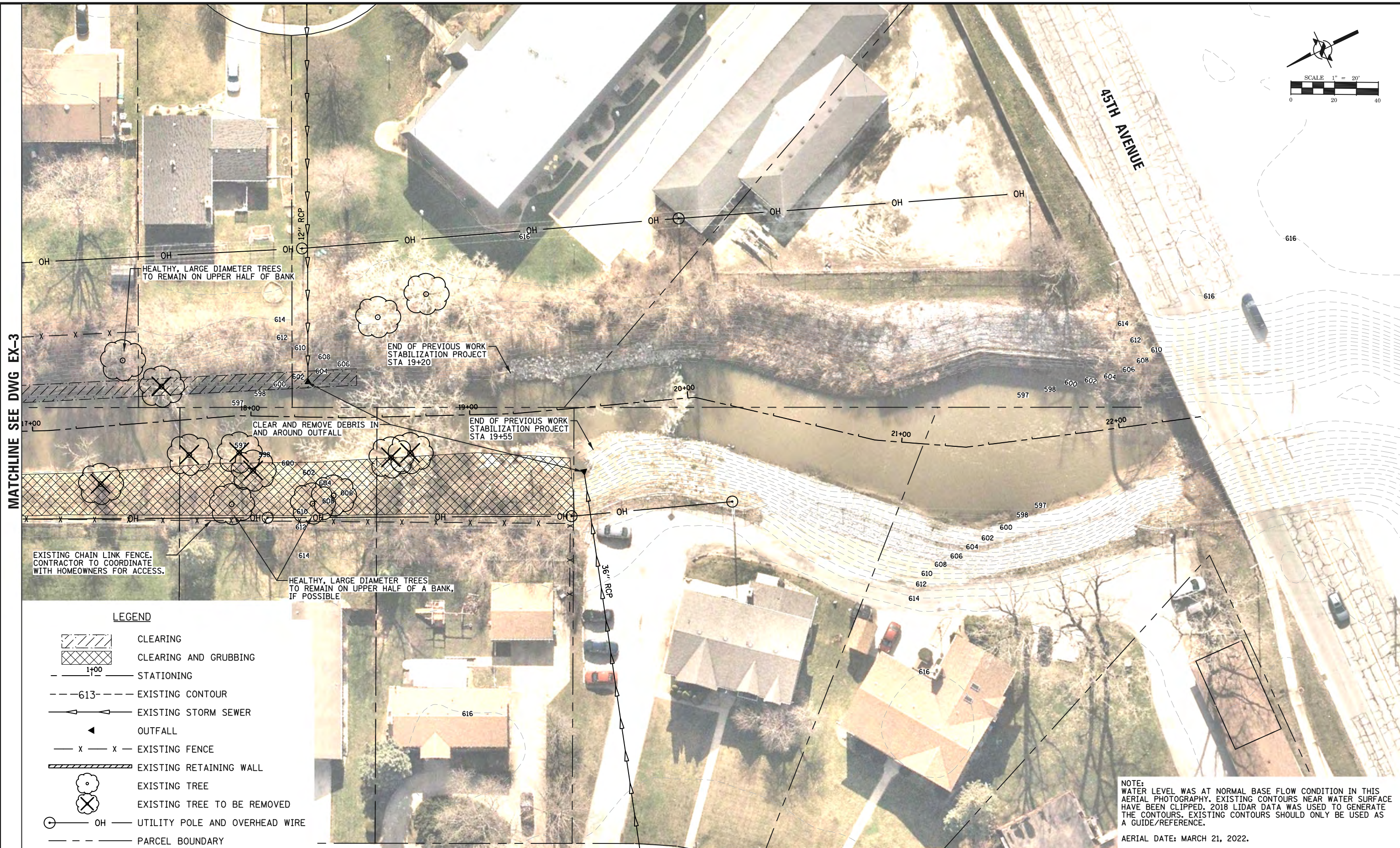
**LAKE COUNTY
SURVEYOR'S OFFICE**

NO.	DATE	NATURE OF REVISION	CHKD.	MODEL
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TITLE:

**EXISTING CONDITIONS
AND REMOVAL PLAN**

PROJ. • 930169.02023F
DATE: 11/20/2023
SHEET 6 OF 19
DRAWING NO.
EX-3



MATCHLINE SEE DWG EX-3

LEGEND


- CLEARING
- CLEARING AND GRUBBING
- STATIONING
- EXISTING CONTOUR
- EXISTING STORM SEWER
- OUTFALL
- EXISTING FENCE
- EXISTING RETAINING WALL
- EXISTING TREE
- EXISTING TREE TO BE REMOVED
- OH UTILITY POLE AND OVERHEAD WIRE
- PARCEL BOUNDARY

NOTE: WATER LEVEL WAS AT NORMAL BASE FLOW CONDITION IN THIS AERIAL PHOTOGRAPHY. EXISTING CONTOURS NEAR WATER SURFACE HAVE BEEN CLIPPED. 2018 LIDAR DATA WAS USED TO GENERATE THE CONTOURS. EXISTING CONTOURS SHOULD ONLY BE USED AS A GUIDE/REFERENCE.

AERIAL DATE: MARCH 21, 2022.

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(847) 823-0500

CLIENT:



**LAKE COUNTY
SURVEYOR'S OFFICE**

NO.	DATE	NATURE OF REVISION	CHKD.	MODEL
1	11/20/2023	PLANNING	JLW	EAT
2	11/20/2023	DESIGN	JLW	TTB
3	11/20/2023	SCALE: 40'	JLW	TTB
4	11/20/2023	PLOT DATE: 11/20/2023	JLW	TTB
5	11/20/2023	CAD USER: mgoldenberg	JLW	TTB
6	11/20/2023	FILE NAME: N:\LCSO IN\930169.02023F\Water\Plan Set\07_930169.02023F_EXL4.dgn	JLW	TTB

TITLE: **EXISTING CONDITIONS AND REMOVAL PLAN**

PROJ. • 930169.02023F
DATE: 11/20/2023
SHEET 7 OF 19
DRAWING NO. EX-4



LEGEND

- 1+00 STATIONING
- - - 613 - - - EXISTING CONTOUR
- EXISTING STORM SEWER
- OUTFALL
- FULL BANK SIDE SLOPE STABILIZATION
- SCOURLOK STABILIZATION
- TUCKED BOULDER TOE STABILIZATION
- PARCEL BOUNDARY

STEWART PARK

NOTES:
1. A MINIMUM 35-FOOT CHANNEL WIDTH AT NORMAL-WATER-LEVEL (NWL) SHALL BE PRESERVED IN THE WATERWAY. PLEASE CONTACT THE ENGINEER IF THIS IS NOT FEASIBLE AT CERTAIN LOCATIONS.

CHRISTOPHER B. BURKE ENGINEERING, LTD.
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Rosemont, Illinois 60018
(847) 823-0500

CLIENT:



**LAKE COUNTY
SURVEYOR'S OFFICE**

NO.	DATE	NATURE OF REVISION	CHKD.	MODEL
1	11/20/2023	Initial Design	JLW	EAT
2	11/20/2023	Revised Design	JLW	EAT
3	11/20/2023	Final Design	JLW	EAT
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7	11/20/2023	Final As-Built	JLW	EAT
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99	11/20/2023	Final As-Built	JLW	EAT
100	11/20/2023	Final As-Built	JLW	EAT

TITLE:

PROPOSED CONDITIONS

PROJ. • 930169.02023F
DATE: 11/20/2023
SHEET 8 OF 19
DRAWING NO.
PR-1



MATCHLINE SEE DWG PR-1

MATCHLINE SEE DWG PR-3

LEGEND

1+00 STATIONING

613 EXISTING CONTOUR

EXISTING STORM SEWER

OUTFALL

FULL BANK SIDE SLOPE STABILIZATION

SCOURLOK STABILIZATION

TUCKED BOULDER TOE STABILIZATION

PARCEL BOUNDARY

NOTES:
1. A MINIMUM 35-FOOT CHANNEL WIDTH AT NORMAL-WATER-LEVEL (NWL) SHALL BE PRESERVED IN THE WATERWAY. PLEASE CONTACT THE ENGINEER IF THIS IS NOT FEASIBLE AT CERTAIN LOCATIONS.

CHRISTOPHER B. BURKE ENGINEERING, LTD.
9575 W. Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

CLIENT:

 **LAKE COUNTY SURVEYOR'S OFFICE**

			DSGN.	JLW	
			DWN.	EAT	
			CHKD.	TTB	
			SCALE:	40'	
			PLOT DATE:	11/20/2023	
			CAD USER:	mgoldenberg	
			CHKD.	MODEL:	Default
NO.	DATE	NATURE OF REVISION			
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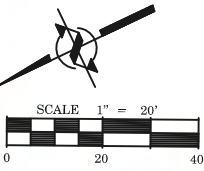
TITLE:

PROPOSED CONDITIONS

PROJ. • 930169.02023F
DATE: 11/20/2023
SHEET 9 OF 19
DRAWING NO.
PR-2

MATCHLINE SEE DWG PR-2

MATCHLINE SEE DWG PR-4



ALL EFFORTS SHOULD BE MADE TO AVOID TREE DISTURBANCE AND REMOVAL ON THE UPPER HALF OF THE BANK

PROPOSED TUCKED BOULDER TOE STABILIZATION (SEE DETAIL)

PROPOSED FULL BANK SIDE SLOPE STABILIZATION (SEE DETAIL)

PROPOSED FULL BANK SIDE SLOPE STABILIZATION (SEE DETAIL)

ATTEMPT SHALL BE MADE TO SAVE ASH TREES

PROPOSED SCOURLOK STABILIZATION (SEE DETAIL)

PROPOSED FULL BANK SIDE SLOPE STABILIZATION (SEE DETAIL)

**9523
WHITE OAK
AVENUE**

**9531
WHITE OAK
AVENUE**

LEGEND

- 1+00 STATIONING
- 613- EXISTING CONTOUR
- EXISTING STORM SEWER
- OUTFALL
- FULL BANK SIDE SLOPE STABILIZATION
- SCOURLOK STABILIZATION
- TUCKED BOULDER TOE STABILIZATION
- PARCEL BOUNDARY

NOTES:
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CLIENT:



**LAKE COUNTY
SURVEYOR'S OFFICE**

NO.	DATE	NATURE OF REVISION	CHKD.	MODEL
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TITLE:

PROPOSED CONDITIONS

PROJ. • 930169.02023F

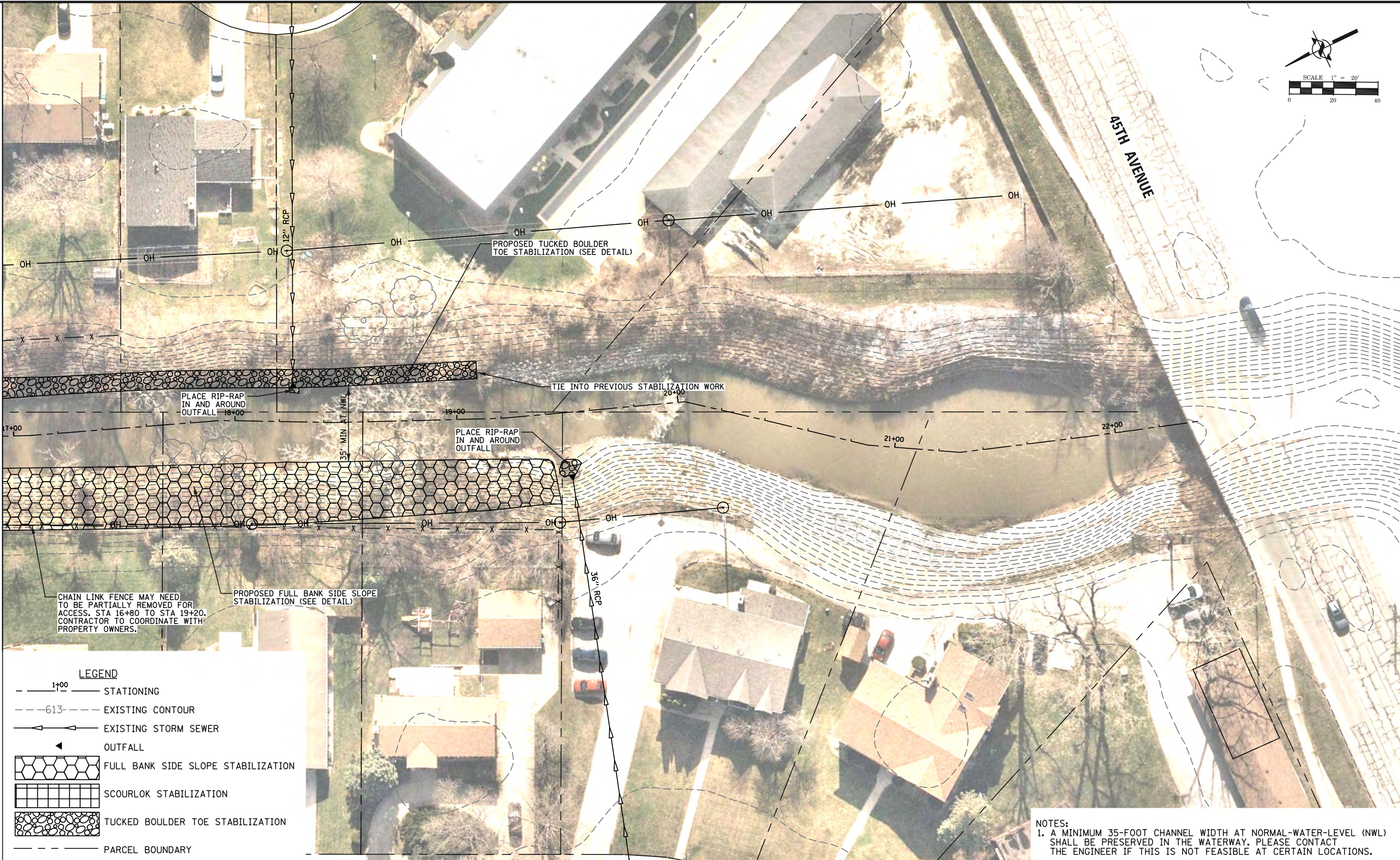
DATE: 11/20/2023

SHEET 10 OF 19

DRAWING NO.

PR-3

MATCHLINE SEE DWG PR-3



LEGEND

- 1+00 STATIONING
- 613- EXISTING CONTOUR
- EXISTING STORM SEWER
- OUTFALL
- FULL BANK SIDE SLOPE STABILIZATION
- SCOURLOK STABILIZATION
- TUCKED BOULDER TOE STABILIZATION
- PARCEL BOUNDARY

NOTES:
1. A MINIMUM 35-FOOT CHANNEL WIDTH AT NORMAL-WATER-LEVEL (NWL) SHALL BE PRESERVED IN THE WATERWAY. PLEASE CONTACT THE ENGINEER IF THIS IS NOT FEASIBLE AT CERTAIN LOCATIONS.

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Rosemont, Illinois 60018
(847) 823-0500

CLIENT:  **LAKE COUNTY SURVEYOR'S OFFICE**

				DSGN.	JLW	
				DWN.	EAT	
				CHKD.	TTB	
				SCALE:	40'	
				PLOT DATE:	11/20/2023	
				CAD USER:	mgoldenberg	
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NO.	DATE	NATURE OF REVISION			CHKD.	
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TITLE:	PROJ. • 930169.02023F
	DATE: 11/20/2023
	SHEET 11 OF 19
	DRAWING NO. PR-4

PROPOSED CONDITIONS



LEGEND

- 1+00 STATIONING
- 613 EXISTING CONTOUR
- EXISTING STORM SEWER
- OUTFALL
- PARCEL BOUNDARY
- SC SILT CURTAIN
- NEW TREES (18' O.C.)
- NEW SHRUBS (GROUP OF 3)

FRAN LIN PKWY

TREES SHALL BE PLACED ON THE
EDGE OF THE GRASS TRAIL

NOTE:
CONTRACTOR TO COORDINATE WITH LCSO, TOWN OF MUNSTER PARKS AND RECREATION DEPARTMENT, AND RESIDENT/PROPERTY OWNERS REGARDING ACCESS TO THE SITE AND PLACEMENT OF CONSTRUCTION ENTRANCE, VEHICLES AND MATERIALS.

RESTORE ALL STREAMBANK DISTURBED AREAS WITH NAG SC150 BN EROSION CONTROL BLANKET AND SEEDING SLOPE MIX.

RESTORE ALL REAR YARD/UPLAND AREAS WITH APPROPRIATE MEASURES, SUCH AS, BUT NOT LIMITED TO, 4" TOPSOIL AND TURF GRASS SEED MIX.

SILT FENCE AND STRAW WATTLE TO BE USED FOR TEMPORARY SPOIL PILES, IF ANY, AND IF DEEMED NECESSARY BY THE ENGINEER.

SEE "TUCKED BOULDER TOE STABILIZATION" DETAIL ON SHEET DET-2 FOR LIVE STAKE INSTALLATION.

CHRISTOPHER B. BURKE ENGINEERING, LTD.
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(847) 823-0500

CLIENT:



**LAKE COUNTY
SURVEYOR'S OFFICE**

NO.	DATE	NATURE OF REVISION	CHKD.	MODEL
1	11/20/2023	11/20/2023	mgoldenberg	Default

DSGN.	JLW
DWN.	EAT
CHKD.	TTB
SCALE:	40'
PLOT DATE:	11/20/2023
CAD USER:	mgoldenberg
MODEL:	Default

TITLE:

**SOIL EROSION &
SEDIMENT CONTROL
AND LANDSCAPING PLAN**

PROJ. • 930169.02023F
DATE: 11/20/2023
SHEET 12 OF 19
DRAWING NO.
SESC-1

MATCHLINE SEE DWG SESC-1



MATCHLINE SEE DWG SESC-3

LEGEND

- 1+00 STATIONING
- 613 EXISTING CONTOUR
- EXISTING STORM SEWER
- OUTFALL
- PARCEL BOUNDARY
- SC SILT CURTAIN
- NEW TREES (18' O.C.)
- NEW SHRUBS (GROUP OF 3)

NOTE:
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9575 W. Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

CLIENT:



**LAKE COUNTY
SURVEYOR'S OFFICE**

				DSGN.	JLW	
				DWN.	EAT	
				CHKD.	TTB	
				SCALE:	40'	
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TITLE:

**SOIL EROSION &
SEDIMENT CONTROL
AND LANDSCAPING PLAN**

PROJ. • 930169.02023F

DATE: 11/20/2023

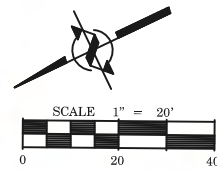
SHEET 13 OF 19

DRAWING NO.

SESC-2

MATCHLINE SEE DWG SESC-2

MATCHLINE SEE DWG SESC-4



LEGEND

- 1+00 STATIONING
- 613- EXISTING CONTOUR
- EXISTING STORM SEWER
- OUTFALL
- PARCEL BOUNDARY
- SC SILT CURTAIN
- NEW TREES (18' O.C.)
- NEW SHRUBS (GROUP OF 3)

NOTE:
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RESTORE ALL STREAMBANK DISTURBED AREAS WITH NAG SC150 BN EROSION CONTROL BLANKET AND SEEDING SLOPE MIX.

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SEE "TUCKED BOULDER TOE STABILIZATION" DETAIL ON SHEET DET-2 FOR LIVE STAKE INSTALLATION.

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CLIENT:



**LAKE COUNTY
SURVEYOR'S OFFICE**

NO.	DATE	NATURE OF REVISION	CHKD.	MODEL
1	11/20/2023	PLANNING	JLW	EAT
2	11/20/2023	DESIGN	JLW	TTB
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TITLE:

**SOIL EROSION &
SEDIMENT CONTROL
AND LANDSCAPING PLAN**

PROJ. • 930169.02023F

DATE: 11/20/2023

SHEET 14 OF 19

DRAWING NO.

SESC-3

MATCHLINE SEE DWG SESC-3



LEGEND

- 1+00 STATIONING
- 613- EXISTING CONTOUR
- EXISTING STORM SEWER
- OUTFALL
- PARCEL BOUNDARY
- SC SILT CURTAIN
- NEW TREES (18' O.C.)
- NEW SHRUBS (GROUP OF 3)

NOTE:
CONTRACTOR TO COORDINATE WITH LCSO, TOWN OF MUNSTER PARKS AND RECREATION DEPARTMENT, AND RESIDENT/PROPERTY OWNERS REGARDING ACCESS TO THE SITE AND PLACEMENT OF CONSTRUCTION ENTRANCE, VEHICLES AND MATERIALS.

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SILT FENCE AND STRAW WATTLE TO BE USED FOR TEMPORARY SPOIL PILES, IF ANY, AND IF DEEMED NECESSARY BY THE ENGINEER.

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9575 W. Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

CLIENT:



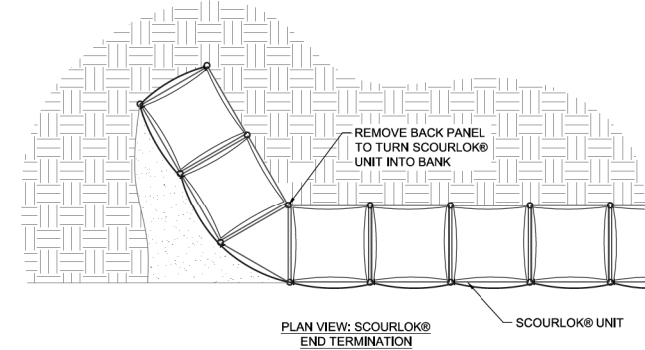
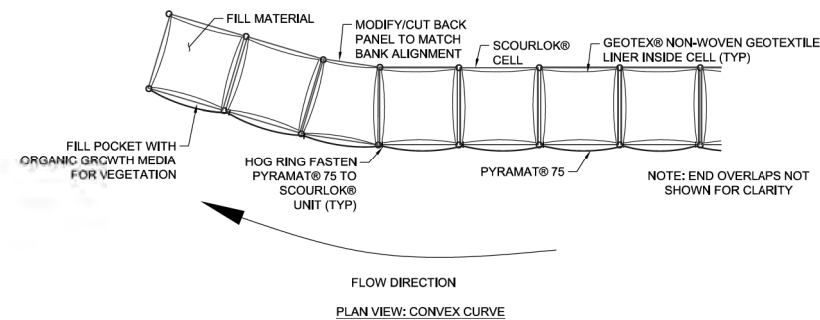
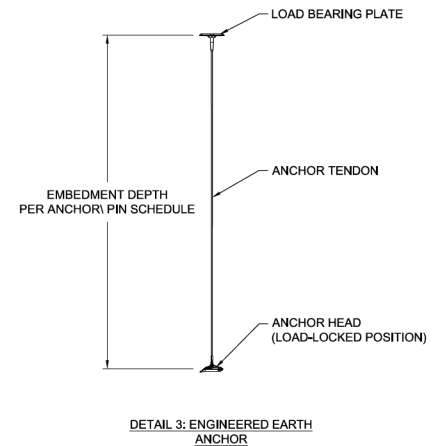
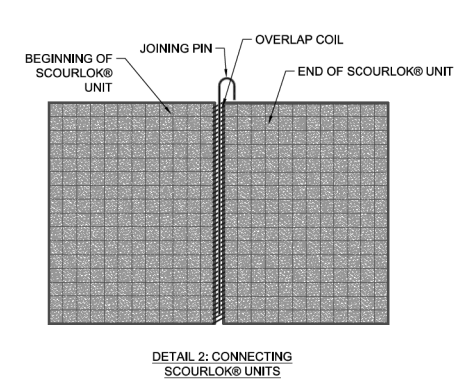
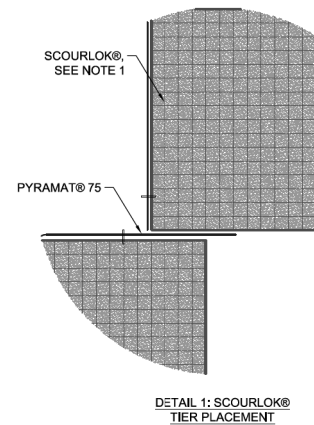
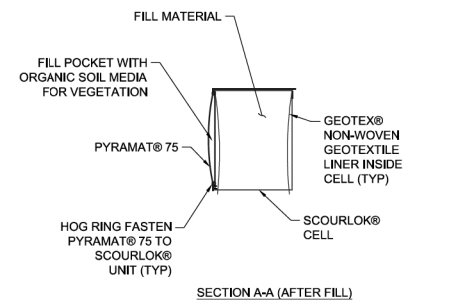
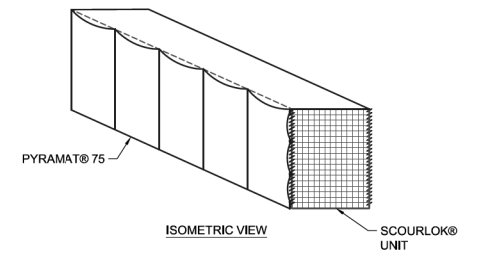
**LAKE COUNTY
SURVEYOR'S OFFICE**

NO.	DATE	NATURE OF REVISION	CHKD.	MODEL
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3	11/20/2023	REVISED TO ADD STAKE INSTALLATION	JLW	TTB
4	11/20/2023	REVISED TO ADD SILT CURTAIN	JLW	TTB
5	11/20/2023	REVISED TO ADD STAKE INSTALLATION	JLW	TTB
6	11/20/2023	REVISED TO ADD SILT CURTAIN	JLW	TTB
7	11/20/2023	REVISED TO ADD STAKE INSTALLATION	JLW	TTB
8	11/20/2023	REVISED TO ADD SILT CURTAIN	JLW	TTB
9	11/20/2023	REVISED TO ADD STAKE INSTALLATION	JLW	TTB
10	11/20/2023	REVISED TO ADD SILT CURTAIN	JLW	TTB

TITLE:

**SOIL EROSION &
SEDIMENT CONTROL
AND LANDSCAPING PLAN**

PROJ. • 930169.02023F
DATE: 11/20/2023
SHEET 15 OF 19
DRAWING NO.
SESC-4



SCOURLOK STABILIZATION DETAIL
CROSS SECTION VIEW

SCOURLOK® ENGINEERED BANK STABILIZATION GENERAL INSTALLATION GUIDELINES

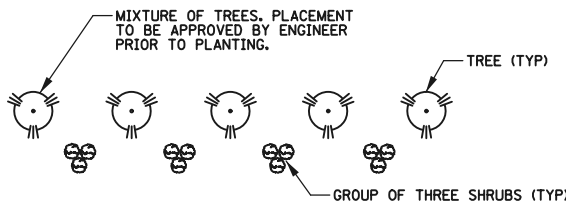
GENERAL NOTES

1. SCOURLOK® Engineered Bank Stabilization provides a durable, geotechnically stable structure that provides immediate erosion protection and long-term vegetative cover. If desired, SCOURLOK is constructed of rigid cells armored with PYRAMAT® 75 High Performance Turf Reinforcement Mat (HPTRM) and internally lined with GEOTEX® 601 nonwoven geotextile. PYRAMAT is fastened to the rigid cells to provide a flexible exterior, control erosion, and improve system durability and forms pockets that can be filled with organic growth media to promote and sustain vegetation. The durable geotextile lining allows the rigid cell to be filled with earth, sand, gravel, crushed rock and other granular material.
2. GEOTEX® 601 is a polypropylene, staple fiber, needle-punched nonwoven geotextile and is resistant to ultraviolet degradation and to biological and chemical environments normally found in soils.

BEFORE INSTALLATION BEGINS

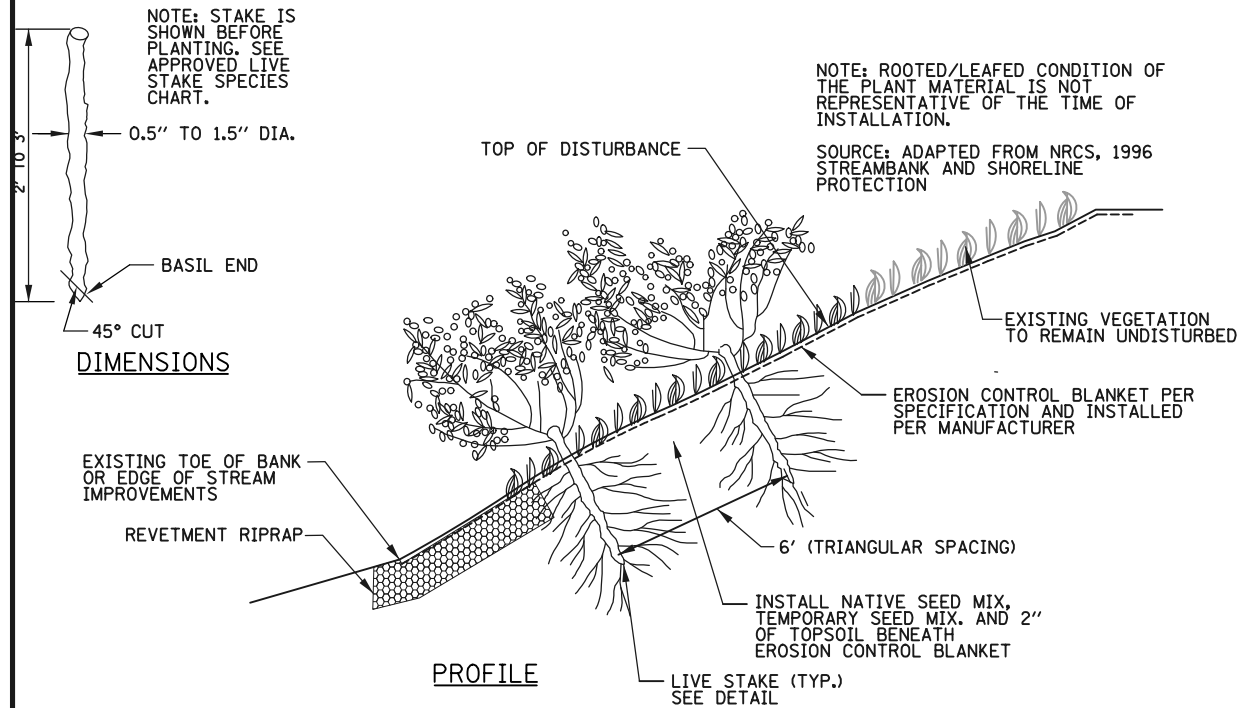
3. Coordinate with a Propex Representative: A pre-construction meeting is suggested with the construction team and a representative from Propex. This meeting should be scheduled by the contractor with at least a two week notice.
4. Gather the Tools Needed: Tools that you will need to install SCOURLOK® include a pair of industrial shears to cut PYRAMAT® 75, tape measure, level, percussion hammer (sized appropriately for the anchors), drive rod compatible with the percussion hammer, drive steel compatible with the anchor, setting tool to set and load-lock the anchor, hog ring gun to fasten PYRAMAT 75 to the SCOURLOK unit, and wire cutters to cut the cable tendon of the anchor. If anchors will be load tested during construction, additional testing equipment may be necessary. Consult the "Anchor Load Test Manual" from Propex for further guidance. Available for purchase from Propex are drive steel, setting tools, and wire cutters.
5. Determine how to Establish Vegetation: The method of vegetation establishment should be determined prior to the start of installation. Different vegetation establishment methods require different orders of installation.
6. Please consult the Propex Website for the most up to date installation guidelines.

			DSGN.	JLW	<div> <div>TITLE:</div> <div>CONSTRUCTION DETAILS</div> </div>	PROJ. * 930169.02023F
			DWN.	EAT		DATE: 11/20/2023
			CHKD.	TTB		SHEET 16 OF 19
			SCALE:	10'		DRAWING NO.
			PLOT DATE:	11/20/2023		DET-1
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NO.	DATE	NATURE OF REVISION	CHKD.			
FILE NAME	N:\C50 IN\930169.02023F\Water\Plan Set\16_930169.02023F_DET_1.dgn					



- NOTES:
1. TREES SHALL BE PLANTED AT 18-FT ON CENTER.
 2. SHRUBS SHALL BE PLANTED IN GROUPS OF THREE.
 3. TREE AND SHRUB PLANTING SCHEDULE: SEPTEMBER 15th TO DECEMBER 15th OR UNTIL THE GROUND HAS FROZEN OR THE LATTER OF MARCH 1st OR WHEN THE FROST LEAVES THE GROUND IN SPRING TO JUNE 1ST.

TREE AND SHRUB SPACING DETAIL

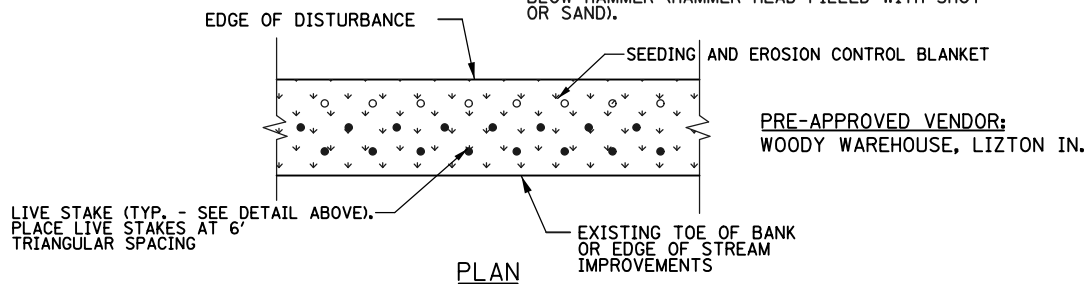


LIVE STAKE MATERIAL PREPARATION

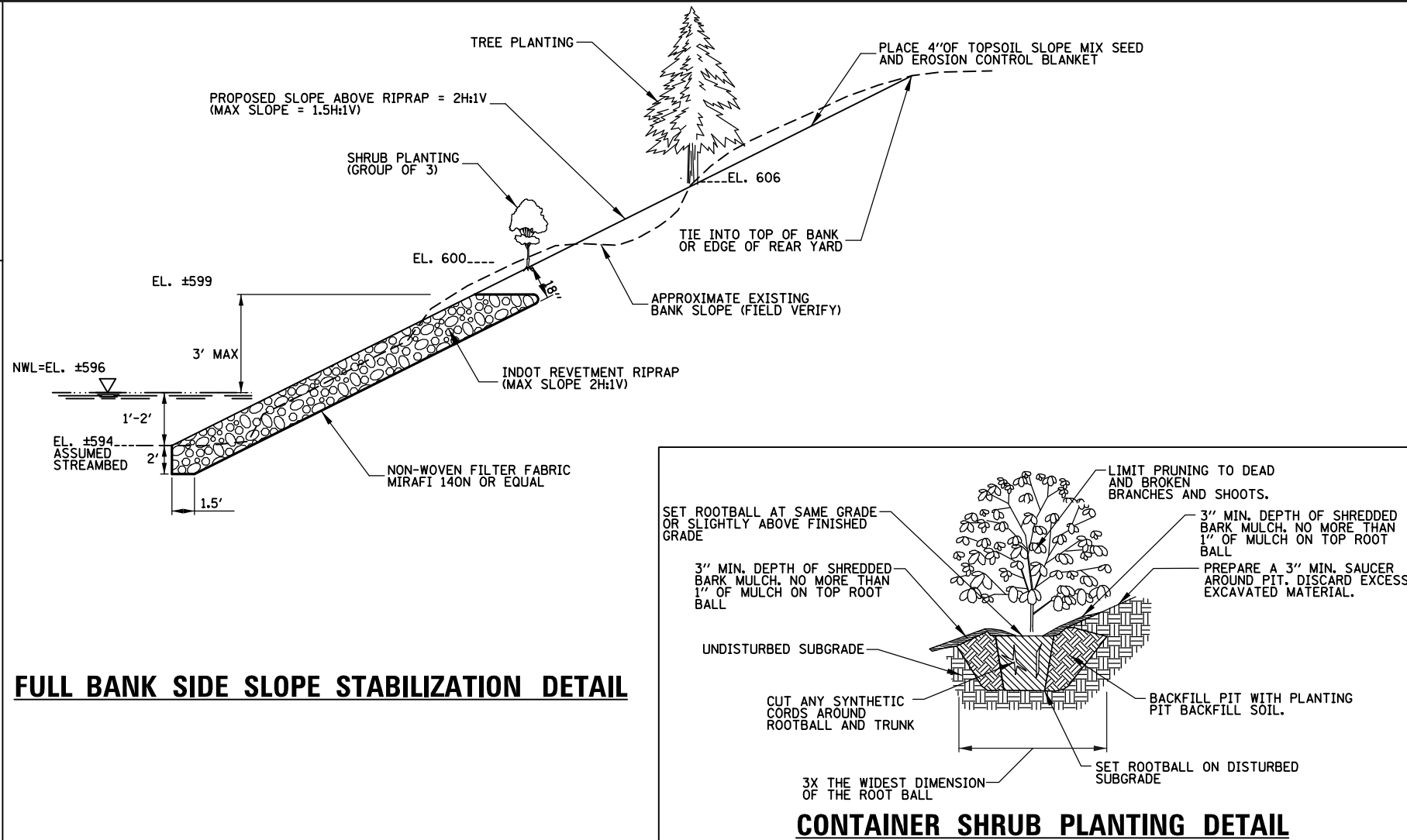
1. THE MATERIALS MUST HAVE SIDE BRANCHES CLEANLY REMOVED WITH THE BARK INTACT. THE BASIL ENDS SHOULD BE CUT AT AN ANGLE OR POINT FOR EASY INSERTION INTO THE SOIL. THE TOP SHOULD BE CUT SQUARE.
2. MATERIALS SHOULD BE SOAKED IN WATER BEFORE INSTALLATION FOR A MINIMUM OF 24-HOURS AND NOT GREATER THAN 7-DAYS AFTER HARVESTING.
3. MATERIALS SHOULD BE INSTALLED THE SAME DAY THAT THEY ARE PREPARED.
4. SOURCE OF MATERIALS TO BE PROCURED LOCALLY AND APPROVED BY ENGINEER OR CAN BE PURCHASED. ASSISTANCE IN LOCATING A LOCAL SOURCE WILL BE PROVIDED BY ENGINEER. SEE APPROVED LIST OF LIVE STAKE SPECIES.
5. MATERIAL TO BE COLLECTED AND INSTALLED WHILE DORMANT.

INSTALLATION OF LIVE STAKES

1. TAMP THE LIVE STAKE INTO THE GROUND AT RIGHT ANGLES TO THE SLOPE AND DIVERTED DOWNSTREAM. THE INSTALLATION MAY BE STARTED AT ANY POINT ON THE SLOPE FACE.
2. THE LIVE STAKES SHOULD BE INSTALLED 3-TO-4-FEET APART USING TRIANGULAR SPACING. THE DENSITY OF THE INSTALLATION WILL BE APPROXIMATELY ONE STAKE PER SQUARE YARD. PLACEMENT MAY VARY BY SPECIES.
3. THE BUDS SHOULD BE ORIENTED UP.
4. FOUR-FIFTHS OF THE LENGTH OF THE LIVE STAKE SHOULD BE INSTALLED INTO THE GROUND, AND SOIL SHOULD BE FIRMLY PACKED AROUND IT AFTER INSTALLATION.
5. DO NOT SPLIT THE STAKES DURING INSTALLATION. STAKES THAT SPLIT SHOULD BE REMOVED AND REPLACED.
6. A STINGER, DIBBLE, AUGER, OR DRILL MAY BE USED TO MAKE A PILOT HOLE. INSERT STAKE TO SPECIFIED DEPTH, BACKFILL HOLE, AND COMPACT.
7. TAMP THE STAKE INTO THE GROUND WITH A DEAD BLOW HAMMER (HAMMER HEAD FILLED WITH SHOT OR SAND).

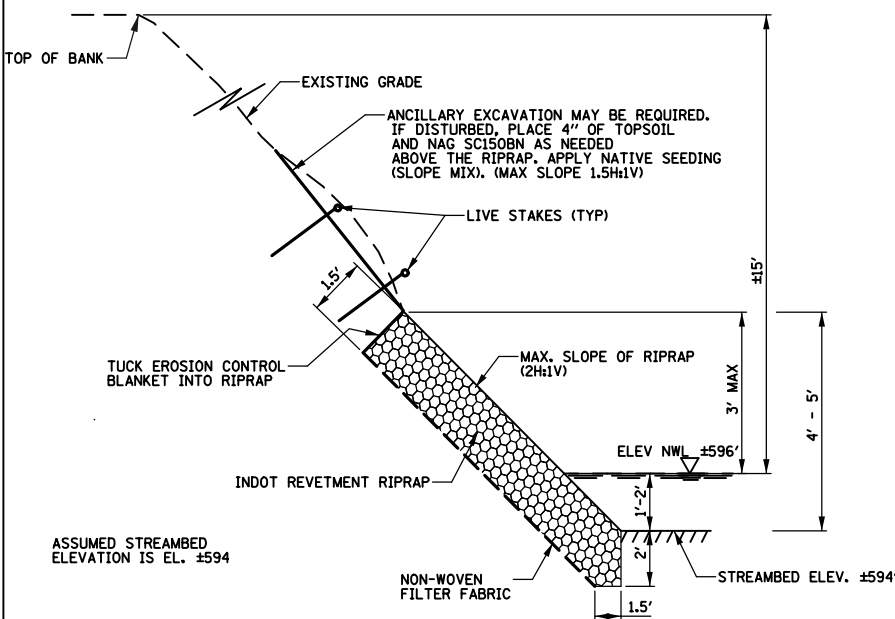


LIVE STAKE DETAIL

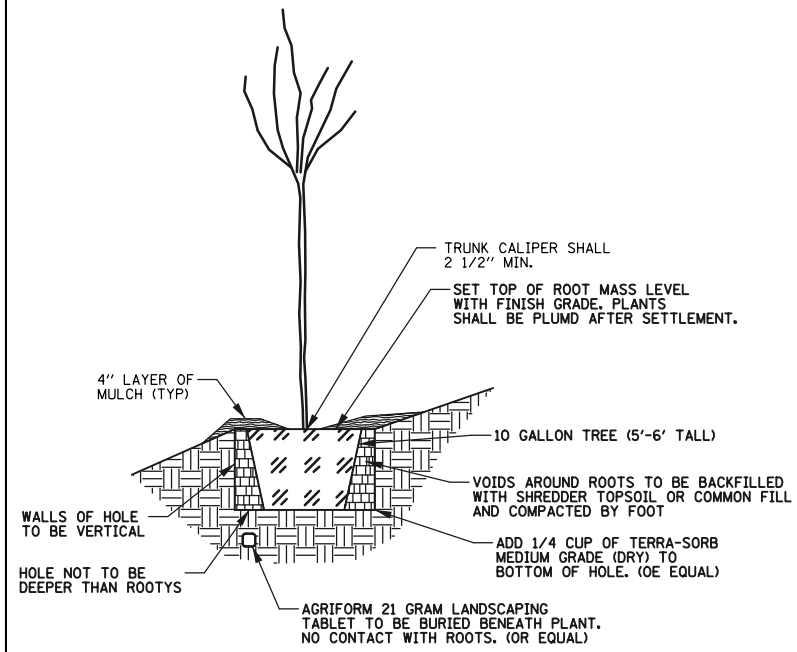


FULL BANK SIDE SLOPE STABILIZATION DETAIL

CONTAINER SHRUB PLANTING DETAIL



TUCKED BOULDER TOE STABILIZATION DETAIL



CONTAINER TREE PLANTING DETAIL



CHRISTOPHER B. BURKE ENGINEERING, LTD.
9575 W. Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

CLIENT:



**LAKE COUNTY
SURVEYOR'S OFFICE**

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				DWN.	EAT	
				CHKD.	TTB	
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TITLE:

CONSTRUCTION DETAILS

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DATE: 11/20/2023

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DRAWING NO.

DET-2

EROSION CONTROL SEQUENCE

1. BEFORE CONSTRUCTION, STAKE THE PROJECT LIMITS.
2. INSTALL PERIMETER PROTECTION IN THE FORM OF SILT FENCE AND SILT CURTAIN.
3. INSTALL CONSTRUCTION ENTRANCE, IF NEEDED.
4. CONTRACTOR SHALL DEVELOP DEWATERING/WATER DIVERSION PLAN IN ACCORDANCE WITH THE INDIANA STORMWATER QUALITY MANUAL AND SUBMIT TO ENGINEER FIR REVIEW AND APPROVAL.
5. CONTRACTOR SHALL MINIMIZE SIZE, AREA OF DISTURBANCE, AND TIME OF EXPOSURE. DISTURBED SOIL SHALL BE SEEDED AND MULCHED AS WORK PROCEEDS.
6. PERFORM EXCAVATION AS REQUIRED TO INSTALL PROPOSED IMPROVEMENTS.
7. PLACE RIPRAP WITH GEOTEXTILE AND OTHER IMPROVEMENTS AS SHOWN ON PLANS.
8. PLACE SEED, FERTILIZER AND MULCH/TOPSOIL ON ALL DISTURBED AREAS WITH SLOPES FLATTER THAN 3(H):1(V) WITH SPECIFIED SEED MIX SEED, FERTILIZER AND EROSION CONTROL BLANKETS SHALL BE PALCED ON ALL DISTURBED AREAS WITH SLOPES 3(H):1(V) OR STEEPER.
9. MAINTAIN EROSION AND SEDIMENT PRACTICES THROUGHOUT THE DURATION OF THE PROJECT. CONTRACTOR SHALL CONTROL DUST ON THE PROJECT SITE WITH WATER TRUCKS. CONTRACTOR SHALL PERFORM STREET SWEEPING AS NECESSARY TO KEEP PUBLIC AND PRIVATE ROADWAYS BEING USED AS TRANSPORTATON ROUTED CLEAN OF DIRT, DUST AND INCIDENTAL CONSTRUCTION DEBRIS.
10. REMOVE ALL TEMPORARY EROSION CONTROL MEASURES UPON OWNER'S APPROVAL AND VEGETATION ESTABLISHED AND APPROVED BY THE ENGINEER.

GENERAL NOTES FOR EROSION AND SEDIMENT CONTROL SEQUENCE

1. THE CONTRACTOR SHALL INSTALL, MONITOR, AND MAINTAIN ALL REQUIRED EROSION CONTROL MEASURES IN A ACCORDANCE WITH THE "INDIANA STORM WATER QUALITY MANUAL".
2. TEMPORARY EROSION AND SEDIMENT CONTROL FEATURES TO PREVENT SEDIMENT FROM LEAVING THE SITE SHOWN ON THE PLANS ARE AT APPROXIMATE LOCATIONS. EROSION CONTROL FEATURES SHALL BE INSPECTED FOLLOWING EACH RAINFALL EVENT. ACCUMULATION SEDIMENT SHALL BE REMOVED IMMEDIATELY. DAMAGED EROSION AND SEDIMENT CONTROL FEATURES SHALL BE REPAIRED AND REPLACED IMMEDIATELY.
3. CONSTRUCTION DEBRIS AND WASTE, SUCH AS GARBAGE, DEBRIS, CLEANING WASTE, ETC., SHALL BE REMOVED FROM THE SITE AND KEPT OUT OF WATER COURSES. PROPER/LEGAL DISPOSAL AND MANAGEMENT OF ALL WASTE IS REQUIRED.
4. THE DURATION OF TIME WHICH AN AREA REMAINS EXPOSED SHALL BE KEPT TO A PRACTICAL MNIMUM DEPENDING ON THE WEATHER. IF CONSTRUCTION ACTIVITY IS TO CEASEFOR MORE THAN 14 DAYS, THE DISTURBED AREAS SHALL BE TEMPORARILY SEEDED.
5. TEMPORARY EROSION CONTROL FEATURES INCLUDE CONSTRUCTION ENTRANCE, SILT FENCE, INLET FILTERS, AND VEGETATION.
6. PERMANENT EROSION CONTROL/STABILIZATION INCLUDE RIPRAP, PERMANENTLY VEGETATION.
7. PERMANENTLY STABILIZE WITH SEED AND MULCH ALL DISBURBED AREAS THAT ARE COMPLETED. PLACE TEMPORARY SEED AND MULCH IN ALL DISTURBED AREAS THAT ARE UNABLE TO BE PERMANENTLY SEEDED.
8. THROUGHOUT CONSTRUCTION, MAINTAIN THE EROSION CONTROL MEASURES AS DESCRIBED ON THE PLANS.
9. REMOVE ALL SILT FROM THE PROJECT SITE AFTER PERMANENT VEGETATION IS ESTABLISHED; REDISTRIBUTE IN APPROPRIATE AREAS OR DISPOSE OFFSITE.

EROSION CONTROL BLANKET

REQUIREMENTS:

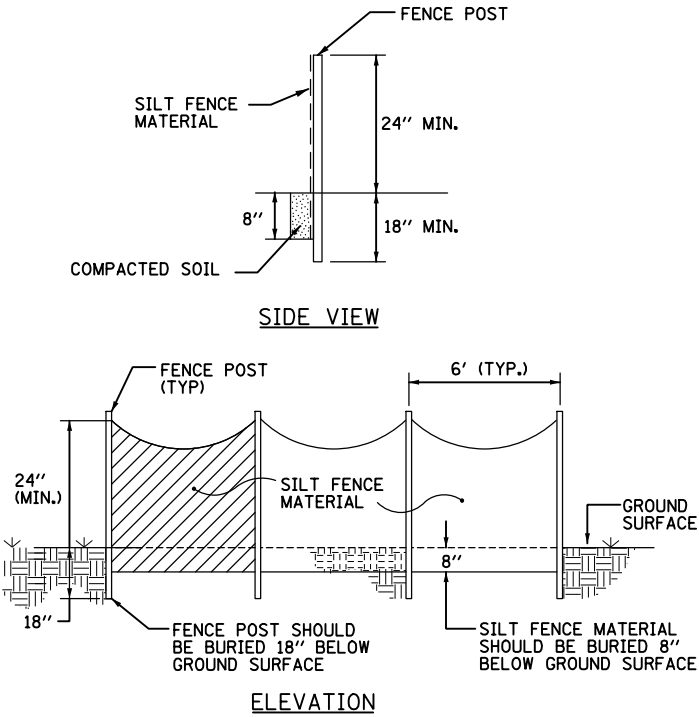
1. NORTH AMERICAN GREEN SC150BN EROSION CONTROL BLANKET OR APPROVED EQUIVALENT.
2. ALL EROSION CONTROL BLANKET USED SHALL BE 100% BIODEGRADABLE.
3. ALL STAKES USED FOR EROSION CONTROL BLANKET SHALL BE WOODEN OR BIODEGRADABLE NO METALS STAKES SHALL BE USED.

INSTALLATION

1. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6-INCH WIDE TRENCH WITH APPROXIMATELY 12-INCHES OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAKES APPROXIMATELY 12-INCHES APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAKING.
2. ROLL THE BLANKET DOWN THE SLOPE, BLANKETS WILL UNROLL WITH THE APPROPRIATE SIDE AGAINST THE ROLL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAKES IN APPROPRIATE LOCATIONS AS PER MANUFACTURER'S SPECIFICATIONS.
3. THE EDGE OF PARALLEL BLANKETS MUST BE STAKES WITH APPROXIMATELY 2- TO 5- INCHES OVERLAP. PLACE THE EDGES OF THE OVERLAPPING BLANKET EVEN WITH THE COLORED SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET.
4. CONSECUTIVE BLANKETS SPliced DOWN THE SLOPE MUST BE PLACED AND OVER END (SHINGLE STYLE) WITH AN APPROPRIATE 3-INCHES OVERLAP. STAKES THROUGH OVERLLAPED AREA, APPROXIMATELY 12-INCHES APART ACROSS ENTIRE BLANKET WIDTH.
5. INSTALL SEEDING AS SPECIFIED BY MANUFACTURER.
6. INSTALL EROSION CONTROL BLANKET AT LOCATIONS SPECIFIED ON PLANS.

MAINTENANCE

DURING VEGETATIVE ESTABLISHMENT, INSPECT AFTER STORM EVENTS FOR EROSION BELOW THE BLANKET. IF ANY AREA SHOWS EROSION, PULL BACK THE PORTION OF THE BLANKET COVERING IT, ADD SOIL, RESEED THE AREA, AND RE-LAY AND STAKE THE BLANKET. AFTER VEGETATIVE ESTABLISHMENT, CHECK THE TREATED AREA PERIODICALLY. ADD ADDITIONAL STAKES AS NECESSARY TO SECURELY ANCHOR THE EROSION CONTROL LANKET.



FILT FENCING

REQUIREMENTS:

1. FENCE POSTS SHALL BE BURIED 18-INCHES MINIMUM BELOW THE GROUND SURFACE.
2. FENCE POSTS SHALL BE SPARED AT A MAXIMUM OF 6-FEET LATERALLY.
3. SILT FENCE FABRIC SHALL BE BURIED 8-INCHES MINIMUM BELOW GROUND SURFACE.
4. FENCE POST SHALL BE HAVE A MINIMUM HEIGHT ABOVE THE GROUND SURFACE OF 24-INCHES.

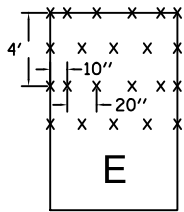
INSTALLATION:

1. DIG AN 8-INCHES DEEP TRENCH ALONG PROPOSED FENCE LINE (A TRENCHING MACHINE IS NEEDED ON LONG RUNS).
2. POUND STAKE IN TRENCH 18-INCHES MINIMUM. BE SURE TO STRETCH
3. FABRIC TAUT WHEN POUNDING STAKES. (NOTE: STAKE MUST BE ON THE DOWNHILL OR DOWNSTREAM SIDE OF THE FENCE.
4. BACKFILL AND COMPACT SOIL ON BOTH SIDES.

MAINTENANCE:

INSPECT THE SILT FENCE PERIODICALLY AND AFTER EACH STORM EVENT. IF FENCE FABRIC TEARS, STARTS TO DECOMPOSE, OR IN ANY WAY BECOMES INEFFECTIVE, REPLACE THE AFFECTED PORTION IMMEDIATELY. REMOVE DEPOSITED SEDIMENT WHEN IT REACHES HALF THE HEIGHT OF THE FENE AT ITS LOWEST POINT OR IS CAUSING THE FABRI TO BULGE. TAKE CARE TO AVOID UNDERMINING THE FENCE DURING CLEANOUT. AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED, REMOVE THE FENCE AND SEDIMENT DEPOSITS, BRING THE DISTURBED AREA TO GRADE AND STABILIZE.

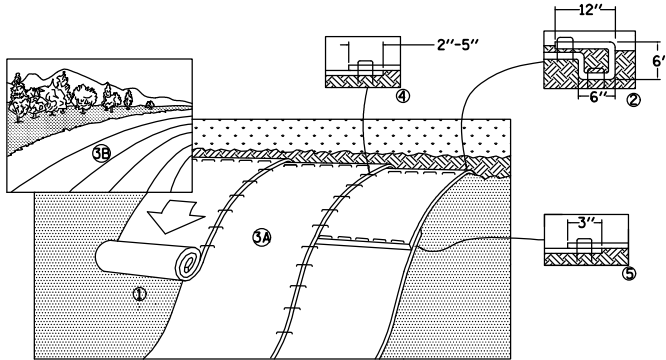
SILT FENCE DETAIL



3.8 STAKES PER SQ YD
DETAIL SOURCE: NORTH AMERICAN GREEN

NOTES:

1. SEE MANUFACTURER'S STAKES PATTERN GUIDES FOR ACTUAL RECOMMENDED PLACEMENTS.
2. FOLLOW NORTH AMERICAN GREEN'S SC150BN SLOPE CONFIGURATION AND PROCEDURE FOR INSTALLATION IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS.



SLOPE INSTALLATION

1. PREPARE SOIL BEFORE INSTALLATION ROLLED EROSION CONTROL PRODUCTS (RECP's) ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
A. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE RECP's IN A 6" (15 CM) DEEP X 6" (15 CM) WIDE TRENCH WITH APPROXIMATE 12" (30 CM) OF RECP's EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECP's WITH A ROW OF STAKES APPROXIMATELY 12" (30 CM) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAKING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30 CM) PORTION OF RECP's BACK OVER SEED AND COMPACTED SOIL. SECURE RECP's OVER COMPACTED SOIL WITH A ROW OF STAKES SPACED APPROXIMATELY 12" (30 CM) APART ACROSS THE WIDTH OF THE RECP's.
3. ROLL THE RECP's (A.) DOWN OR (B.) HORIZONTAL ACROSS THE SLOPE. RECP's WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECP's MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAKE PATTERN GUIDE. WHEN USING THE DOT SYSTEM, STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAKES PATTERN.
4. THE EDGE OF PARALLEL RECP's MUST BE STAKED WITH APPROXIMATELY 2"-5" (5 CM-12.5 CM) OVERLAP DEPENDING ON RECP's TYPE.
5. CONSECUTIVE RECP's SPliced DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE (7.5 CM) OVERLAP. STAKE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30 CM) APART ACROSS ENTIRE RECP's WIDTH.
A. NOTE: *IN LOOSE SOIL CONDITIONS, THE USE OF STAKE LENGTHS GREATER THAN 6" (15 CM) MAY BE NECESSARY TO PROPERLY SECURE THE RECP's.

EROSION CONTROL BLANKET DETAIL



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CLIENT:



LAKE COUNTY
SURVEYOR'S OFFICE

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CONSTRUCTION DETAILS

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DATE: 11/20/2023

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DRAWING NO.

DET-3

