

CONTRACT AND SPECIFICATIONS  
FOR THE  
CONSTRUCTION OF THE  
ANCHORAGE DRAIN  
BANK STABILIZATION PROJECT

Located in Section 10, Township 17 North, Range 5 East

FALL CREEK TOWNSHIP, HAMILTON COUNTY INDIANA

## HAMILTON COUNTY DRAINAGE BOARD

### BIDDER'S CHECK LIST

BID FORM and SUPPLEMENTAL BID FORM completely filled out and signed by Contractor.

Contract filled out and signed by Contractor

Bid Bond or Certified Check -5% of Bid Amount

Form 96 completely filled out

Plan of Action

Equipment Questionnaire

Experience Questionnaire

Employment Eligibility Certification

Financial Statement

Acknowledge of Receipt of Addendum, if applicable

Certificate of Liability Insurance

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**NOTICE TO BIDDERS**

NOTICE IS HEREBY GIVEN THAT SEALED BIDS FOR THE RECONSTRUCTION OF THE **ANCHORAGE DRAIN BANK STABLIZATION,** **PROJECT** 152 FEET, MORE OR LESS IN LENGTH IN SECTION **10,** TOWNSHIP **17** NORTH, RANGE **5** EAST, **FALL CREEK TOWNSHIP** WILL BE OPENED AND READ ON THE **22nd** DAY OF **July 2024** AT **9:00 A.M.** BY THE HAMILTON COUNTY DRAINAGE BOARD IN THE HAMILTON COUNTY COMMISSIONERS COURT IN THE HAMILTON COUNTY JUDICIAL BUILDING, ONE HAMILTON COUNTY SQUARE, NOBLESVILLE, INDIANA 46060-2230.

All bids must be on proposal forms furnished by the Hamilton County Surveyor and accompanied by a bid bond or certified check in an amount equal to five percent (5%) of the bid amount. The bidder shall also execute a **FORM 96** as required by the State Board of Accounts and include a notarized non-collusion affidavit with the bid documents.

Plans and specifications for the project are on file in the office of the Hamilton County Drainage Board / Surveyor's Office at One Hamilton County Square, Suite 188, Noblesville, Indiana 46060.

A non-refundable fee for plans and specifications of seventy five dollars (\$75.00) is required. Check payable to the Hamilton County Treasurer.

**ALL BIDS WILL BE SUBMITTED TO THE DRAINAGE BOARD SECRETARY BY 9:00 A.M. July 22, 2024**

Attest: Lynette Mosbaugh  
Executive Secretary

## INSTRUCTIONS TO BIDDERS

### **BASIS ON WHICH BIDS ARE SOLICITED:**

Bids are solicited on the basis of a Base Bid and Supplementary Bids clearly set forth in the Bid Form and the Plans and Specifications.

Base Bid items must be stated in figures and the grand total of bids for all items proposed computed and stated in figures. All bids for the supplementary items must be stated in figures.

Bidders shall make proposals on the complete project and bids will not be accepted which are partial and bids will not be accepted where the bidder bids on only one item.

### **SCHEDULE OF QUANTITIES SHOWN IN PROPOSAL FORM:**

The schedule of quantities as shown in the Base Bid, although stated with as much accuracy as is possible in advance, is approximated only, and is assumed solely for the purpose of comparing bids. The quantities on which payments will be made to the Contractor from the Supplementary Bids will be determined from the actual amount of the materials used and work done. The Contractor shall furnish such additional work or materials deemed necessary by the Surveyor to complete the project, and any extra compensation to the Contractor shall be at the Base Bid price. If the Base Bid does not include the particular work item, machine cost or material, then the cost shall be determined by the Supplementary Bid. If a discrepancy occurs between like work items, machine cost or material cost in the Base Bid and Supplemental Bid, the lower of the two costs will be used for determining the cost for additional work or materials. Likewise the Contractor shall not receive payment for any quantity deemed unnecessary by the Surveyor provided that notice is given by the Surveyor in sufficient time to protect the Contractor against any commitments he may have made to suppliers of labor or materials.

The Contractor shall be bound to comply with the prevailing scale of minimum wages as provided by law.

Materials shall be of a quality equal or superior to the requirements of the Plans and Specifications. The burden of proof of quality of any substitution shall be the Contractors. Any dispute arising as the material or workmanship shall be settled by the Surveyor on behalf of the Board and his decisions shall be final.

The Bids for all material and work shall include installation and completion at the site of work. The Board shall not be liable for payment of any sales tax or other tax whatsoever that may be levied by the Federal Government, State Government, or other private, public or political agency. All materials and equipment must be transported to the site of the work by the Contractor and no additional compensation will be allowed for such transportation.

**BIDS:**

Bidders shall submit bids on the form provided herein, all parts of which shall be filled in. Each bid shall be submitted in a sealed ten (10") inch by thirteen (13") (10"x13") inch envelope addressed to the Hamilton County Drainage Board, One Hamilton County Square, Suite 188, Noblesville, Indiana-46060. There shall be one bid per envelope. The envelope shall also bear the NAME and Address of the person or firm submitting the bid and the Name of the Project for which the bid is submitted.

The Hamilton County Drainage Board reserves the right to correct any apparent error resulting from erroneous mathematical calculation before awarding a contract. The legal status of the bidder must be stated on Form Number 96.

A partnership bidder must give the full names and addresses of all partners and must be signed by at least one (1) person who shall designate himself as a partner authorized to sign on behalf of all partners.

When persons doing business under an assumed name submit a bid, all such persons must sign the bid and Form Number 96. A corporate bidder must name the state in which it is incorporated. The bid must be signed in the name of and under the seal of the corporation, by a duly authorized officer or agent of the corporation and his address given. Such officer or agent must be present legal evidence that he has lawful authority to sign said bid and the signature

is binding upon the corporation and that the corporation has a legal existence. In the event that any corporation organized and doing business under laws of any foreign state, is a successful bidder, such a corporation shall present evidence before a contract for said work is executed, that is authorized to do business in the State of Indiana.

**BID DEADLINE:**

All bids shall be submitted no later than 9:00 A.M. on date of opening.

**BIDDER'S OBLIGATION OF EXAMINATIONS:**

Bidders are required to examine the Instructions to Bidders, Plans, Specifications, Contract, Bid Form, the site of the proposed work, and other data which may be on file in the office of the Surveyor. No pleas of ignorance of conditions that exist or of conditions or difficulties that may be encountered in the execution of the work under this contract, as a result of a failure to make the necessary examination and investigations, will be accepted as an excuse for any failure or omissions on the part of the Contractor to fulfill in every detail all requirements of the Contract, Plan and Specifications, or will be accepted as a basis for any claims whatsoever for extra compensation. Upon request, all available information in the possession of the Surveyor will be shown to the bidder, but correctness of such information is not guaranteed.

**BIDDERS NON-COLLUSION AFFIDAVIT:**

No bid will be considered unless accompanied by a Bidder's Non-Collusion Affidavit Form, properly executed and notarized. The Contractor shall furnish a list of all equipment he has.

**FINANCIAL STATEMENT:**

All Bidders shall submit as a part of the bid General Form Number 96, as prescribed by the State Board of Accounts, and entitled, "Standard Questionnaire and Financial Statement for Bidders."

**BOND:**

Bidder shall submit with his proposal a Bid Bond or Certified Check in an amount equal to five (5%) percent of the total amount of the Bid. Certified checks and or Bid Bonds shall be made payable to the Hamilton County Drainage Board and shall be retained by the Board as liquidated

damages if the successful bidder fails to execute a contract within five (5) days after award of contract has been made.

Unsuccessful bidders may have their certified check or Bid Bond returned to them any time after an acceptable contract performance bond has been executed and a contract signed.

**WITHDRAWAL OF BIDS:**

Bidders may withdraw bids at any time prior to the scheduled bid deadline. Bidders will not be permitted to withdraw Bids at or after Bid Deadline.

**REJECTION OF BIDS:**

The Board reserves the right to reject any bid for any reason, including those containing any omission, additions, extensions, erasures, alterations, or irregularities of any kind. The judgment of the Board shall be final in determining the capability, experience and ability of the Bidder to successfully and properly prosecute the contract.

**EXPERIENCE QUESTIONNAIRE:**

All bidders shall submit as part of the bid, the Experience Questionnaire on the form provided.

**EQUIPMENT QUESTIONNAIRE:**

All bidders shall submit as part of the bid, the Equipment Questionnaire on the form provided.

**PLAN OF ACTION:**

All bidders shall submit as part of the bid, the plan of action on the form provided.

**ADDENDUM:**

Any addendum issued during the time of bidding, or forming a part of the contract documents given to the bidder for preparation of his proposal, shall be covered in the proposal and shall be acknowledge and attached to the proposal.

**EMPLOYMENT ELIGIBILITY CERTIFICATION:**

All bidders shall submit as part of the bid the Employment Eligibility Certification on the form provided.



## GENERAL PROVISIONS

### **DEFINITION OF TERMS:**

Drainage Board: Whenever the word "Drainage Board" or "Board" appears in these specifications and contract it shall be understood as referring to the Hamilton County Drainage Board, or any Joint Board, as established by Chapter 305 of the Acts of the Indiana General Assembly.

Surveyor: Whenever the "Surveyor" appears in these specifications and contract it shall be understood as referring to the Surveyor of Hamilton County, Indiana, or his duly authorized employee, agent, or other representative.

Contractor: Whenever the word "Contractor" appears on these specifications and contracts it shall be understood as referring to the person, partnership, firm, or corporations who shall enter into an agreement with the Drainage Board to perform the work herein described.

### **BOND:**

The Contractor to whom the contract is awarded shall provide a performance bond acceptable to the Board in the amount of at least 120% of the contract price which shall be forfeited, in whole or in part, should he fail to perform the work as provided by these specifications. The Bond shall be submitted within five (5) days of the acceptance of the contractor bid and shall continue in force for one (1) year from the date of acceptance of the completed project by the Board and shall contain a maintenance clause to cover all guarantees against defective material and workmanship.

### **INSURANCE:**

The Contractor shall adhere to the insurance requirements as set out in the attachment entitled "AMENDED HAMILTON COUNTY POLICY ESTABLISHING INSURANCE REQUIREMENTS FOR VENDORS" dated December 21, 2020.

### **ENGINEERING SUPERVISION:**

All work performed under this contract shall be under the supervision and direction of the Surveyor who will survey and set stakes if necessary; also furnish plans, technical advice and/or assistance for each project which may be ordered by the Drainage Board and all work shall be performed as directed by the Surveyor or his

representative.

The Contractor shall set an appointment to meet with the Surveyor within five (5) days of the acceptance of the Contractor's bid. At this time the Contractor and Surveyor shall review all aspects of the project. The Contractor shall not start work until this conference is held.

The Contractor shall, at all times during his absence from the work, have upon the job a competent supervisor to whom orders and instructions may be addressed or delivered. "The Contractor or his foreman shall have in his possession a complete set of plans and specifications whenever work is in progress on the job site". The Contractor or his representatives shall contact the Surveyor's Office each day work is performed. The Contractor shall have on the job site a cellular telephone at all times while work is in process.

**WORKMAN'S COPMENSATION:**

The Contractor shall be required to comply with regulations set out by the Indiana State Industrial Board in reference to the provision of the Indiana Workman's Compensation Act, and any amendments thereto.

**NON-DISCRIMINATION PROVISION:**

The Contractor on this project agrees that in the hiring of employees for the performance of work under this contract or any sub-contract hereunder, no Contractor, Sub-Contractor, or any person acting on behalf of such Contractor or Sub-Contractor shall discriminate against any employee or applicant for employment, with respect to his hire, tenure, terms, conditions or privileges of employment or any matter directly or indirectly related to employment, because of his race, color, religion, national origin, or ancestry.

**COMPLETION DATE:** The bidder is cautioned that the completion date for this project is **September 30, 2024** and that failure to complete the project in accordance with plans, specifications and special provisions of this contract by this date, shall result in a deduction of any monies due the Contractor, not as a penalty, but as liquidated damages.

Said deductions will be computed at the rate of \$100.00 per day times the number of calendar days past completion date.

**EASEMENT:**

The Contractor shall use the easement provided by law for the Board or its duly authorized representative. This easement is as shown on plans. The Contractor will however, respect the limitation of the easement in cases where the Board has entered into a non-enforcement agreement. The Contractor shall use due care to avoid damage to crops, livestock, fences, buildings and other structures outside of the easement, and to crops and approved structures as mentioned above inside the easement insofar as possible. The Contractor shall be held liable for any un-necessary damage to crops, livestock, fences, buildings, existing drainage structures, highway, railroad or private bridges or culverts or any property whatsoever ever. Repair or replacement of any such damage to any public or private property, due to the negligence or carelessness of the Contractor, shall be at the expense of the Contractor.

**SAFETY PRECAUTIONS:**

The Contractor shall erect and maintain throughout the course of the project all necessary barricades, warning signs or lights to protect the safety of the public. The Contractor shall use all due and proper precaution to prevent injury to any property, person or persons and shall omit no reasonable precautions which provide for the security of all persons and property. The Contractor will be held responsible for any damages that any party may sustain in consequence of neglecting the necessary precaution in prosecuting the work. For safety reasons the operation side of the project shall be the side opposite a County or State Road if the project parallel such a road. All applicable Federal, State and Local Safety Codes and Regulations shall be adhered to during all phases of construction on this project.

**PERMITS, STATE AND LOCAL ORDINANCES:**

The Contractor shall obtain and pay at his expense all permits and licenses, give all notices, pay charges and fees necessary and incident to the prosecution of the work. The Contractor shall comply with all Federal, State and Local laws, Ordinances, Rules and Regulations bearing on the conduct of the work.

**ADDENDUM AND CHANGE ORDERS:**

Any addendum issued before the opening of bids shall become a part of this contract and be added to the bid. Any change order issued after the award of the contract shall also become a part of the contract. Any increase or decrease in the contract price as a result of a change order shall be determined as stated in the Instruction to Bidders. Addendum or change orders shall be made in writing with a copy to the Contractor and another placed in the contract.

**LIABILITY OF CONTRACTOR:**

The Contractor shall indemnify and save harmless the Board, Surveyor and their agents, representatives and employees from all damages, suites, judgments, actions, expenses or claims or any character brought on account of any injury or damages sustained by any person, or property from acts of such Contractor, in consequence of any neglect in safeguarding the work, arrangement or operation of any tools, machinery, appliances, devices or materials which may be used or furnished by the Contractor, or through the use of improper materials in constructing the work, or because of any action, omission, neglect or misconduct of said Contractor, or because of any claims or amount arising or recovered under the Workman's Compensation Act, or any other law, bylaw, amendment, ordinance, order or decree. The Board may retain for its use so much of the money due said Contractor under his contract as shall be considered necessary by the Board until aforesaid shall have been settled and suitable evidence to that effect is furnished the Board. In case no money is due the Contractor, his surety shall not be released until such suits, or claims for injuries of damages as aforesaid shall have been settled and suitable evidence to that effect furnished the person or persons herein receiving bids.

**ASSIGNMENT OF CONTRACT:**

The Contractor shall not subcontract or assign this contract, or any part thereof, without the written consent of the Board, which consent may be withheld only for good cause.

Requests for permission to subcontract or assign any portion of the contract shall be in writing and accompanied by a letter showing that the organization which is to perform the work is particularly experienced and equipped for such work. The Board may require the subcontractor to

submit questionnaires to establish his experience and financial ability. Provisions of the contract shall apply to the subcontractor the same as is applies to the Contractor. Consent from the Board to subcontract or assign any portion of the contract shall not relieve the Contractor of any responsibility to fulfill the contract.

**COOPERATION WITH PUBLIC UTILITIES:**

Prior to the start of construction the Contractor will notify by certified mail all public utilities who may own poles, lines, transformers, wire, cables, pipes, conduit, etc. on or adjacent to the site of the proposed work. The Contractor shall be held responsible to notify any public utilities and arrange for the relocation of any of its properties which may interfere with safe prosecution of the work. In no case will the Board be held responsible for any cost involved in the relocation or rerouting of any poles, lines, transformers, wires, cables, pipes, conduit, etc. on or adjacent to the site of the proposed work and the Contractor agrees to save the Board harmless from any such claims. Due precaution and cooperation shall be exercised by the Contractor to prevent damage to such property, hazards to traffic or other liability.

**MATERIAL:**

ALL MATERIAL USED IN THE PROSECUTION OF THE WORK SHALL COMPLY WITH THE CURRENT INDIANA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, current version, and if a request is made, any material shall be made available to the Surveyor for inspection and/or testing. Any material rejected shall be removed from the site of the project at the expense of the Contractor.

**EQUIPMENT:**

The Contractor shall furnish the equipment necessary for the completion of the work. All equipment used in the prosecution of the work shall be adequate for the work to be performed, and in good working order.

**REJECTION OF WORK DONE:**

If in the opinion of the Surveyor any portion of the work completed by the Contractor does not meet the specifications by being incomplete or unsatisfactory the Contractor shall do whatever necessary to complete the work to the Surveyors satisfaction at no extra cost to the Board.

**BRIDGES:**

Clean out under or through any County, State, Railroad or Private bridge or culvert as specified in the contract or as directed by the County Surveyor, shall be at the expense of the Contractor and no extra compensation will be allowed for such work. Removal, lowering or replacement of any County, State Railroad or Private Bridge or culvert as specified in the contract shall be a separate bid item on the bid form.

**INTERPRETATION OF CONTRACT DOCUMENTS:**

The contract documents are complementary and what is called for by one shall be as binding as if called for by all. The intent of the contract documents is to include in the contract prices, the cost of all labor, materials, water, fuel, tools, plant, equipment, light, transportation, and all the other expense as may be necessary for the proper execution of the work, complete and ready for continuous service.

In case of discrepancy in the drawings and in the specifications, the matter shall be immediately called to the attention of the Surveyor, who shall make a decision as the true meaning intended. Any attempt by the Contractor to remedy or adjust such discrepancy, without the decision of the Surveyor, will be entirely at the Contractor's risk. The Surveyors decision shall be in the form of a written addendum, a copy of which shall be sent to all prospective bidders.

The work is to be done complete and to the satisfaction of the Surveyor, notwithstanding any minor omissions in the specifications or drawings. Plans are drawn to scale as shown, but written dimensions shall take preference over scaled dimensions.

It is understood by all concerned that the apparent silence of the specifications as to any detail or the apparent omission of a detailed description concerning any point shall be regarded as meaning that only the best general practice is to prevail and that only material and workmanship of the first quality is to be used. All interpretations of these specifications shall be made upon this basis.

**SURVEYOR'S DECISIONS:**

To prevent disputes and litigation, it is further agreed by and between the Board and Contractor, that the Surveyor shall determine all questions in relation to the construction of the work and the Surveyor shall, in all cases, decide all questions which may arise in regard to the work under this contract, and this decision shall be a condition precedent to the right of the Contractor to receive any money or compensation for anything done or furnished under this contract.

**REJECTION AND ACCEPTANCE OF WORK:**

In case the Contractor neglects or refuses, after written notice, to remove or replace any rejected work, the same may be removed and replaced by the Board at the expense of the Contractor or the Contractor's Surety.

None of the work done or materials and appurtenances furnished shall be finally accepted until the entire contract is completed, inspected and ready for acceptance.

Until final acceptance of the work by the Surveyor, it shall be under the charge and care of the Contractor, and he shall take every necessary precaution against injury or damage to the work by traffic, by the action of elements, or from any other cause, whatsoever. No equipment shall be removed from the project area until the project is approved by the Surveyor.

**PARTIAL PAYMENT:**

The Surveyor may authorize partial or progress payments for work performed in the amounts not in excess of eighty-five (85%) percent of the contract price of the work then completed.

The value of the work performed may be estimated by the Surveyor at the end of each calendar month. ("Work Performed" as herein used, is interpreted to include materials for the project which are incorporated into the work as part of the complete construction.)

Fifteen (15%) percent of the contract price will be with held by the Board for a period of sixty (60) days after the final acceptance of the work by the Surveyor for the purpose of securing payments of material, men laborers and sub-contractors.

The Contractor shall meet with the Inspector/Surveyor at any time a claim for payment is submitted so as to review the claim.

**FINAL PAYMENT:**

After the final approval and acceptance by the Surveyor of all the work contacted for, the Contractor shall furnish the Board a sworn statement stating that all expenses incurred for labor and materials have been paid in full. A form for this statement is provided after DRC-2.

**TERMINATION OF CONTRACT:**

If the Contractor fails or refuses to perform the work in an acceptable manner, the Board may give notice in writing to the Contractor and his surety of such failure or refusal, specifying the same and directing what action shall be taken.

Any one or more of the following will be considered sufficient justification for such notice:

1. Failure to begin the work under the contract within the time specified
2. Failure to perform the work with sufficient supervision, workman, equipment and materials to insure the prompt completion of said work
3. Unsuitable performance of the work;
4. Neglecting or refusal to remove defective materials or failure to perform anew such work as may have been rejected:
5. Discontinuing the prosecution of the work or any part of it
6. Inability to finance the work adequately;
7. If for any reason, the Contractor fails to carry on the work in an acceptable manner.

If the Contractor, or his surety, within a period of ten (10) days after such notice does not proceed in compliance therewith, then the Board shall have full power and authority, without violating the contract, to remove the prosecution of the work out of the hands of said Contractor, to appropriate or use any and all materials and



equipment on the ground as may be suitable and acceptable and may, at his option, turn the work over to the surety, or enter into an agreement with another Contractor for the completion of the Contract according to terms and provisions therefore, or he may use such other methods as, in his opinion, shall be required for the completion of said contract in an acceptable manner.

All costs of completing the work under the contract shall be deducted from any monies due or which may become due said Contractor. In case the expense so incurred by the Board may be less than the sum which would have been payable under the contract if it had been completed by said Contractor, then said Contractor shall be entitled to receive the difference, but in case such expense shall exceed the sum which would have been payable under the contract, then the Contractor and his surety shall be liable and shall pay to the Board the amount of said excess.

## SPECIFICATIONS

### **CLEARING:**

Location and amount of clearing to be done by the Contractor shall be set out in the SPECIAL INSTRUCTIONS. All stumps that interfere or that are likely to interfere with the flow of ditch shall be removed and disposed of by the Contractor, all others to be cut off flush with the ground and will be treated with approved brush killer having a dye additive such as DOW TORDON 101R. In area adjacent to the ditch banks, stumps, brush, logs, wire, rocks, or other debris more than 1/3 cubic foot in volume shall be buried with at least three (3') feet of cover or disposed of by the Contractor by removing debris from site or by burning if the proper permits are obtained. Copies of the permits are to be filed with the County Surveyor before burning commences. Debris which remains after burning shall be buried. In no case shall the burying or covering of any material which will interfere with normal farming operations be tolerated.

Areas of burying shall be chosen by the Contractor with approval of the landowners and the County Surveyor. The cost of clearing shall include the disposal of debris.

The right is reserved for landowners, with the approval of the County Surveyor, to mark any trees to be saved. **Landowner may request clearing items to be stacked or piled rather than disposed of per above. In these instances the landowner must provide written request to the County Surveyor for approval. Areas on landowner's property for such storage shall be outside of the regulated drain easement and shall be the responsibility of the landowner for disposal.** The Contractor shall not remove trees from a landowner's property unless written consent is received from the landowner and a copy of which is given to the County Surveyor.

Any exceptions to these clearing specifications must have the approval of the County Surveyor, and if the County Surveyor demands written consent of the landowner. The Contractor shall submit a copy of Commercial Applicator License to the Hamilton County Surveyor's Office prior to commencement of clearing operations.

**EXCAVATING:**

The excavation shall be done according to the grade, bottom width, side slope and depth as shown in the plans and specifications. The bank shall be left as nearly smooth and even as possible to secure the same in a good and workmanlike manner. To accomplish this, the Contractor shall use a Hydraulic Excavator with a smooth edged ditch bucket or dragline. All washes shall be filled and all open laterals entering the main ditch shall be cleared and cleaned a minimum of fifty (50') feet on uniform grade to meet the natural grade of the lateral and no extra compensation shall be allowed for such work. The Contractor is expected to make all feasible alignments of the ditch bottom necessary to accomplish the best possible finished channel under the existing circumstance. Extra compensation will not be allowed the Contractor for excavation made in addition to the amount shown in the specifications unless so ordered by the County Surveyor. Any cutoff, widening or change in channel not specified in the specifications will be paid for at the unit price bid or at a price per unit as agreed upon by the Contractor and the County Surveyor.

No open ditch shall be undercut more than eight (8") inches from grade shown on profile. Bottom width shall be measured at the elevation of the designed bottom.

The right is reserved, without impairing the contract, to order the performance of such work, or class of work not contemplated in the proposal, as may be considered necessary to complete fully and satisfactorily the work included in the contract. Such extra work shall be done by the Contractor and he shall be compensated at a price per unit as agreed upon by the Contractor and the County Surveyor.

**EXCAVATED MATERIAL:**

Excavated material shall be spread so that a minimum of ten (10') foot berm shall be left between the top of the ditch bank and the spread spoil. The slope of the spoil from the berm's edge to the maximum height shall be 5:1. From the maximum height the spoil will have an 8:1 back slope to field level. The maximum height of the spoil from the original ground elevation shall be eighteen (18") inches. All spoils shall be placed on the side of the ditch designated by the County Surveyor in the SPECIAL INSTRUCTIONS. The finished spoil shall be left in a smooth

manner, so that any average crop farm tractor can be driven over all parts of it with a reasonable degree of safety and economy. All spoil banks shall be leveled to the satisfaction of the County Surveyor and all compensation for leveling spoil banks shall be included in the bid price for excavation.

Landowners concerned may authorize bucket spread or spoil piles, but the Contractor is warned that written consent from the landowner shall be obtained to eliminate liability for un-spread spoil, brush or stumps.

In a case where the special specifications or provisions include the spreading of spoil heretofore left un-spread by a former clean out or dredging process, the same clearing and spreading specifications herein set out shall apply both to the former un-spread spoil and the spoil made available by the work herein proposed.

**RIP RAP:**

Riprap shall be seven (7") inches or nine (9") inches graded size or as indicated in the SPECIAL INSTRUCTIONS.

**PAVEMENT REPLACEMENT:**

Pavement replacement of State Highway shall be done as provided for in the "INDIANA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, current version. Pavement replacement of Hamilton County Roads shall be done as provided in the "Hamilton County Standard for Construction of Road Improvements" current version. County Roads shall be backfilled with flowable fill even with the existing road surface as directed by the County Highway Engineer. Contractor shall notify County or State Highway Departments before construction in Right-Of-Ways begins. Pavement replacement for city or town streets shall be done per the specifications of the city or town owning the right-of-way.

**INLETS, CATCH BASINS, BREATHERS, MANHOLES, JUNCTION BOXES:**

The construction and location of inlets, catch basins, breathers, manholes and junction boxes shall be set out in the SPECIAL INSTRUCTIONS and shall be an individual bid item.

**CONCRETE:**

Concrete shall be of a classification as specified in the Special Specifications plans. The unit price of concrete in place as shown in the plans shall include the forms and

reinforcing steel of size, quantity, and designation as shown on the plans and all concrete shall be of a quality and shall be placed in a manner as provided by the "INDIANA DEPARTMENT OF TRANSPORTATION (INDOT) STANDARD SPECIFICATIONS", current edition.

**CORRUGATED METAL PIPE:**

Corrugated metal pipe, helcor or equal shall be of gauge and quality that will meet the provision of Section 908-Metal Pipe as set forth in the "Indiana Department of Transportation (INDOT) Standard Specifications, current edition" unless stated otherwise in the SPECIAL INSTRUCTIONS or approved by the County Surveyor. The unit price shall include all materials, pipe, bands, bolts, labor and machinery to place the pipe on grade and to backfill as directed. Standard coupling bands with a minimum length of twelve (12") inches shall be used.

**TILE DRAIN EXTENSION:**

A twenty (20') foot section of corrugated metal pipe will be installed for drains outletting into the ditch at locations as shown on the plans, and at other locations where tile outlets are encountered during construction. The pipe should slip around the existing tile, by using a pipe one size larger diameter than the diameter of the existing tile. Pipe shall extend out from the ditch bank to such a position that the outlet is one (1') foot back of the bottoms edge and no more than three (3') feet above the ditch bottom as profile. Payment for these items will be made based on the actual number and sizes installed at the various locations at the various bid prices per lineal foot. All outlets shall be fitted with an approved animal guard.

**DRAIN TILE:**

Materials for use shall be equal or superior to the quality provided in Section 907 of the "Indiana Department of Transportation Standard Specifications, current version" or as specified in the SPECIAL INSTRUCTIONS.

**TILE EXCAVATING AND BACKFILL:**

All work related to this section shall conform to the applicable sections of the "Indiana Department of Transportation Standard Specifications, current version", or as specified in the SPECIAL INSTRUCTIONS. Cost of the excavating and backfilling shall be included in the bid price of the tile.

**SEEDING AND FERTILIZING:**

1. Channel side slopes will be seeded twice. The first seeding will occur at the end of each day's construction, while the ground is still moist. Fertilizer will be applied. Apply the second seeding just prior to final inspection. Only those areas where the grass has not germinated will be seeded the second time. The seed and fertilizer will be applied with a broadcast type seeder.

QUANTITIES:

Tall Fescue (low or endophyte free)	35 lbs/acre
Annual Rye Grass	20 lbs/acre
12-12-12 Fertilizer	1000 lbs/acre

SUBSTITUTE THE FOLLOWING FOR RYE GRASS

Oats-----March 15 through May 1  
Wheat-----October 1 through November 1

2. Disturbed areas that are not in crop production will be seeded and fertilized upon final grading. Apply fertilizer and work into the soil to a depth of two (2") inches or three (3") inches with a harrow or disc. Prepare a firm seed bed with a cultipacker or cultipacker type seeder. Work the seed into the soil 1/4 to 1/2 inch deep. Straw mulch will be used around erosion control structures and other critical areas as determined by the project inspector.

QUANTITIES:

General purpose farm mix	20 lbs/acre
12-12-12 Fertilizer	1000 lbs/acre
Straw Mulch (where required)	3000 lbs/acre

GENERAL PURPOSE MIX:

20%	Perennial Rye Grass
20%	Timothy
13%	Orchard Grass
12%	Red Star Clover
12%	Tall Fescue
12%	Vernal Alfalfa
11%	Alsike Clover

3. All erosion structures, waterways or other areas indicated in the SPECIAL INSTRUCTIONS shall be mulched. Mulch shall consist of 1 1/2 tons of dry material per acre. Material shall consist of straw or hay or other, if approved by the Surveyor. Mulch shall be applied at a rate of fifty-five (55) bales per acre after seeding-fertilizing the area.

**CLEAN UP:**

The Contractor shall, at all times, keep the premises free from accumulations of waste material or rubbish caused by his employees or work. At the completion of the work, he shall remove all rubbish, tools, equipment and surplus material from the premises and shall leave his work area in a neat and presentable condition.

**OCCUPATIONAL SAFETY AND HEALTH ADMIN., LABOR:**

SUBPART P-EXCAVATING, TRENCHING AND SHORING Authority:

Sec 107, Contract Work Hours and Safety Standards Act (Construction Safety Act) (40 U.S.C. 33): Sections 4,6,8 Occupation Safety and Health Act of 1970 (29 U.S.C. 653 ,655 657); Secretary of Labor's Order No 12-71 (36 FR 8754),8-76 (41 FR 25059, or 9-83 (48 FR 35736),as applicable. 1926.650 General Protection Requirements

(a) Walkways, runways, and sidewalks shall be kept clear of excavated material or other obstruction and no sidewalks shall be undermined unless shored to carry a minimum live load of one hundred and twenty-five (125) pounds per square foot.

(b) If planks are used for raised walkways, runways, or sidewalks, they shall be laid parallel to the length of the walk and fastened together against displacement.

(c) Planks shall be uniform in thickness and all exposed ends shall be provided with beveled cleats to revert tripping.

(d) Raised walkways, runways and sidewalks shall be provided with plank steps on strong stringers. Ramps, used in lieu of steps, shall be provided with cleats to insure a safe walking surface.

(e) All employees shall be protected with personal protective equipment of the protection of the head, eyes respiratory organs, hands, feet and other parts of the body as set forth in Subpart E of this part.

(f) Employees exposed to vehicular traffic shall be provided with and shall be instructed or wear warning vests marked with or made of reflecting or high visibility material.

(g) Employees subject to hazardous dusts, gases, fumes, mists, or atmospheres deficient in oxygen, shall be protected with approved respiratory protection as set forth in Subpart D of this part.

(h) No person shall be permitted under loads handled by power shovels, derrick, or hoists. To avoid spillage, employees shall be required to stand away from any vehicle being loaded.

(i) Daily inspections of excavations shall be made by a competent person. If evidence of possible cave-ins or slides is apparent, all work in the excavation shall cease until the necessary precautions have been taken to safeguard the employees. 1926-651

SPECIFIC EXCAVATION REQUIREMENTS:

(a) Prior to opening an excavation, effort shall be made to determine whether underground installations; i.e., sewer, telephone, water, fuel, electric lines, etc. will be encountered, and if so, where such underground installations are located.

When the excavation approaches the estimated location of such an installation, the exact location shall be determined and when it is uncovered, proper supports shall be provided for the existing installation. Utility companies shall be contacted and advised of proposed work prior to the start of actual excavation.

(b) Trees, boulders, and other surface encumbrances, located so as to create a hazard to employees involved in excavation work in the vicinity thereof at any time during operations, shall be removed or made safe before excavating is begun.



(c) The walls and faces of all excavations in which employees are exposed to danger from moving ground shall be guarded by a shoring system, sloping of the grounds or some other equivalent means.

(d) Excavations shall be inspected by a competent person after every rainstorm or other hazard-increasing occurrence, and the protection against slides and cave-in shall be increased if necessary.

(e) The determination of the angle of repose and design of the supporting system shall be based on careful evaluation of pertinent factors such as: Depth of cut; possible variation in anticipated changes in materials from exposure to air, sun, water, or freezing; loading imposed by structures, equipment, overlying material, or stored material; and vibration from equipment, blasting, in traffic, or other sources.

(f) Supporting systems; i.e.; piling, cribbing, shoring' etc., shall be designed by a qualified person and meet accepted engineering requirements. When tie rods are used to restrain the top of sheeting or other retaining systems, the rods shall be securely anchored well back of the angle of repose. When tight sheeting or sheet piling is used, full loading due to ground water table shall be assumed, unless prevented by weep holes or drains or other means. Additional stringers, ties and bracing shall be provided to allow for any necessary temporary removal of individual supports.

(g) All slopes shall be excavated to at least the angle of repose except for areas where solid rock allows for line drilling or pre-splitting.

(h) The angle of repose shall be flattened when an excavation has water conditions, silty materials, loose boulders, and areas where erosion, deep frost action, and slide planes appear.

(i) (1.) In excavations which employees may be required to enter, excavated or other material shall be effectively stored and retained at least two (2') feet or more from the edge of the excavation.

(2.) As an alternative to the clearance prescribed in paragraph (i)(1.) of this section, the employer may use effective retaining devices in lieu thereof in order to revert excavated or other materials from falling into excavation.

(j) Sides, slopes and faces of all excavations shall meet accepted engineering requirements by scaling, benching, barricading, rock bolting, wire meshing, or other equally effective means. Special attention shall be given to slopes which may be adversely affected by weather or moisture content.

(k) Support systems shall be planned and designed by a qualified person when excavation is in excess of twenty (20') feet in depth, adjacent to structures or improvements, or subject to vibration or ground water.

(l) Materials used for sheeting, sheet piling, cribbing, bracing, shoring, and underpinning shall be in good serviceable condition, and timbers shall be sound, free from large or loose knots, and of proper dimensions.

(m) Special precaution shall be taken in sloping or shoring the sides of excavations adjacent to a previously backfilled excavation or a fill, particularly when the separation is less than the depth of the excavation. Particular attention also shall be paid to joints and seams of material comprising a face and the slope of such seams and joints.

(n) Except in hard rocks, excavating below the level of the base of footing of any foundation or retaining wall shall not be permitted, unless the wall is underpinned and all other precautions taken to insure the stability of the adjacent walls for the protection of employees involved in excavation work or in the vicinity thereof.

(o) If the stability of adjoining buildings or walls is endangered by excavations, shoring, bracing, or underpinning shall be provided as necessary to insure their safety. Such shoring, bracing or underpinning shall be inspected daily or more often as conditions warrant, by a competent person and the protection effectively maintained.

(p) Diversion ditches, dikes or other suitable means shall be used to prevent surface water from entering an excavation and to provide adequate drainage of the area adjacent to the excavations.

(q) If it is necessary to place or operate power shovels, derricks, trucks, materials or other heavy objection a level above and near an excavation, the side of the excavation shall be sheet-piled, shored and braced as necessary to resist the extra pressure due to such superimposed loads.

(r) Blasting and the use of explosives shall be performed in accordance with Subpart U of this part.

(s) When mobile equipment is utilized or allowed adjacent to excavations, substantial stop logs or barricades shall be installed. If possible, the grade should be away from the excavation.

(t) Adequate barrier physical protection shall be provided at all remotely located excavations. All well, pits, shafts, etc. shall be barricaded or covered. Upon completion of exploration and similar operations, temporary wells, pits, shafts, etc., shall be backfilled.

(u) If possible, dust conditions shall be kept to a minimum by the use of water, salt, calcium chloride, oil or other means.

(v) In locations where oxygen deficiency or gaseous conditions are possible, air in the excavations shall be tested. Contracts, as set forth in Subpart D and E of this part, shall be established to assure acceptable atmospheric conditions. When flammable gases are present, adequate ventilation shall be provided or sources of ignition shall be eliminated. Attended harness and line, basket stretcher, etc., shall be readily available where adverse atmospheric conditions may exist or develop in an excavation.

(w) Where employees or equipment are required or permitted to cross over excavations, walkways or bridges with standard guardrails shall be provided.

(x) Where ramps are used for employees or equipment, they shall be designed and constructed by qualified person in accordance with accepted engineering requirements.

(y) All ladders used on excavations operations shall be in accordance with the requirements of Subpart L of this part. '1926.652

SPECIFIC TRENCHING REQUIREMENTS:

(a) Banks more than five (5') feet high shall be shored, laid back to a stable slope or some other equivalent means or protection shall be provided where employees may be exposed to moving ground or cave-ins. Refer to Table P-1 as a guide in sloping of banks. Trenching less than five (5') feet in depth shall also be effectively protected when examination of the ground indicates hazardous grounded movement may be expected.

(b) Sides and trenches in unstable or soft materials, five (5') feet in depth, shall be shored, sheeted, braced, sloped or otherwise supported by means of sufficient strength to protect the employees working within them. See Tables P-q, P2 (following paragraph (g) of this section.

(c) Sides of trenches in hard or compact soil, including embankments, shall be shored or otherwise supported when the trench is more than five (5') feet in depth and eight (8') feet or more in length. In lieu of shoring, the sides of the trench above the five (5') foot level may be sloped to preclude collapse, but shall not be steeper than a one (1') foot rise to each 1/2 foot horizontal. When the outside diameter of a pipe is greater than a six (6') feet, a bench of four (4') feet minimum shall be provided at the toe of the sloped portion.

(d) Materials used for sheeting and sheet piling, bracing shoring and underpinning, shall be in good serviceable condition, and timbers used shall be sound and free from large or loose knots, and shall be designed and installed so as to be effective to the bottom of the excavation.

(e) Additional precautions by way of shoring and bracing shall be taken to prevent slides or cave-ins when excavations or trenches are made in locations adjacent to backfilled excavations, or where excavations are subject to vibrations from railroad or highway traffic, the operation of machinery or other source.

(f) Employees entering bell-bottom pier holes shall be protected by the installation of a removable-type casting of sufficient strength to resist shifting of the surrounding earth. Such temporary protection shall be provided for the full depth of that part of each pier holes which is above the bell. A lifeline, suitable for instant rescue and securely fastened to a shoulder harness, shall be worn by each employee entering the shafts. This lifeline shall be individually manned and separate from any line used to remove materials excavated from the bell footing.

- (g) (1) Minimum requirements for trench timbering shall be in accordance with Table P-2.  
(2) Braces and diagonal shores in a wood shoring system shall not be subjected to compressive stress in excess of values given by the following formula:

$$S=1300-20 L/D$$

Maximum Ratio L/D=50

Where:

L = length, unsupported, in inches

D = Least side of the timber in inches

S = Allowable stress in pounds per square inch of cross-section

**CONFINED SPACE REQUIREMENTS:**

CONTRACTORS SHALL COMPLY WITH ALL RULES AND REGULATIONS AS SET OUT FOR CONFINED SPACE ENTRY. ALL PROCEDURES SHALL COMPLY WITH 29CFR PARTS 1910.

AMENDED HAMILTON COUNTY POLICY  
ESTABLISHING INSURANCE REQUIREMENTS FOR VENDORS

Vendors, who enter into a contract with Hamilton County, the Hamilton County Airport Authority, the Hamilton County Drainage Board, the Hamilton County Health Department, the Hamilton County Parks and Recreation Department, and the Hamilton County Solid Waste Board (hereinafter collectively “the County”), shall be required to provide a Certificate of Insurance to the County as part of the contract. A copy of this Policy shall be included in any requests for bids, quotations, rental agreements or other proposals.

- A. Each contract with the County shall require a Certificate of Insurance. Those contracts, whether the result of bids, quotes, or negotiation, shall include but not limited to, the following:
1. Services provided to any office or department of the County.
  2. Renters, tenants, instructors/teachers, and recreational users of any property owned or operated by the County, if the rental payment exceeds \$500 per day or event, if the proposed event could potentially include over fifty (50) individuals, if property being used includes the historic courthouse square, or if the rented facility is planned to be used to provide alcohol.
  3. All construction contracts.
  4. All contracts for maintenance and repair services, which includes “on call” agents.
  5. Design services including buildings, roads, bridges, and other infrastructure.
  6. Contracts for design and/or installation of software and hardware systems in any County building or facility.

7. Vendors who regularly provide deliveries of supplies and/or services to various offices of the County, including repair services, maintenance services, and delivery of water, office supplies, and similar products.

8. Riverview Hospital.

B. All Certificates of Insurance shall include the following coverages and meet the following requirements:

1. Commercial General Liability Insurance

a. The CONSULTANT/CONTRACTOR/VENDOR (hereinafter collectively "VENDOR") must obtain and carry Commercial General liability insurance at limits not less than \$1,000,000 per occurrence basis, \$2,000,000 general aggregate. Coverage shall be on an occurrence form and include contractual liability. The policy shall be amended to include the following extensions of coverage:

- i. Exclusions relating to the use of explosives, collapse, and underground damage to property shall be removed.
- ii. The policy shall provide thirty (30) days notice of cancellation to County.
- iii. Exclusions for independent contractors and/or exclusions for type of work being performed shall be removed unless the independent contractors has their own insurance policy that is subject to the terms stated herein this Policy. The independent contractor's insurance policy must include, at a minimum, all of the requirements stated herein.
- iv. The VENDOR shall name the County as an additional insured on a primary and non-contributory basis and shall provide for a waiver of subrogation for the additional insureds.

- v. The VENDOR shall expressly waive any and all claims of subrogation against the County that arises from existence or performance of the agreement between the VENDOR and the County.

2. Automobile Liability

- a. The VENDOR shall obtain automobile liability insurance covering all owned, leased, borrowed, rented, or non-owned autos used by employees or others on behalf of the VENDOR for the conduct of the VENDOR's business, for an amount not less than \$1,000,000 combined single limit for bodily injury and property damage. The term "automobile" shall include private passenger autos, trucks, and similar type vehicles licensed for use on public highways. The policy shall be amended to include the following extensions of coverage:
  - i. If applicable, as determined by the County's Legal Counsel, Contractual Liability coverage shall be included.
  - ii. The policy shall provide thirty (30) days notice of cancellation to the County.
  - iii. The VENDOR shall name the County as an additional insured on a primary and non-contributory basis and shall provide for a waiver of subrogation for the additional insureds.

3. Workers Compensation and Employers Liability

- a. The VENDOR, who comes on County premises, must obtain and carry workers' compensation and employers' liability insurance with policy limits not less than \$500,000 each accident, \$500,000 each employee, and \$500,000 policy limit.
  - i. In lieu of obtaining and carrying workers' compensation and employers' liability insurance independent contractors can fill out and file with the State of Indiana a WCE-1 Application for Workers' Compensation Clearance Certificate (hereinafter "WCE-1 Form"). Once the WCE-1 Form has been approved by the State of Indiana the independent contractor shall upload the certificate of approval to the County's Compliance Vendor prior to entering into any agreement with the County.
- b. The policy shall not exclude any owners, partners, or proprietors.



- c. Workers' compensation shall include a waiver of subrogation in favor of County and provide thirty (30) days notice of cancellation to the County.
- d. A VENDOR that does not come on County property is exempt from the workers' compensation requirements of this policy.

4. Umbrella/Excess Liability

- a. The VENDOR must obtain and carry an umbrella/excess liability policy with a combined single limit of \$1,000,000 and provide thirty (30) days notice of cancellation to the County.
- b. The umbrella/excess policy may be used to meet the required limits and coverage for the general liability and auto liability policies provided such umbrella/excess liability policy result in the same or greater coverage.

C. The following coverages shall be applicable based upon the services being provided:

1. Professional Liability Insurance

- a. The VENDOR must obtain and carry professional liability insurance in an amount of \$1,000,000 per claim and \$2,000,000 aggregate for all claims for negligent performance. When a VENDOR is building or designing a bridge, a building, or any other significant structure the VENDOR must carry professional liability insurance in the amount of \$5,000,000 per claim and \$5,000,000, aggregate for all claims for negligent performance or one additional reasonable amount included in the contract as agreed to by the parties. The VENDOR shall maintain the coverage for a period ending two (2) years after substantial completion of construction or the termination of this contract, whichever is longer. Waiver of subrogation in favor of County shall apply if automatically included in the professional liability policy.

2. Watercraft Liability

- a. When necessary to use watercraft for the performance of the VENDOR's Services under the terms of this Contract, either by the VENDOR, or any SUB-VENDOR, the VENDOR or SUB-VENDOR operating the watercraft shall carry watercraft liability insurance in the amount of \$1,000,000 combined single limit for bodily injury and property damage, including protection & indemnity where applicable. Coverage shall apply to owned, non-owned, and hired watercraft.

- b. If the maritime laws apply to any work to be performed by the VENDOR under the terms of the agreement, the following coverage shall be provided:
    - i. United States Longshoremen & Harbor workers
    - ii. Maritime Coverage - Jones Act
  - c. The policy shall provide thirty (30) days notice of cancellation to the County.
  - d. The VENDOR or SUB-VENDOR shall name the County as an additional insured.
3. Aircraft / Unmanned Aircraft Systems Liability
- a. When necessary to use an aircraft for the performance of the VENDOR's services under the terms of this Contract, either by the VENDOR or SUB-VENDOR, the VENDOR or SUB-VENDOR operating the aircraft shall carry aircraft liability insurance in the amount of \$1,000,000 for un-manned aircraft systems and \$5,000,000 for manned aircraft systems combined single limit for bodily injury and property damage, including passenger liability except for unmanned aircraft, and including personal injury coverage.
  - b. Coverage shall apply to owned, non-owned, and hired aircraft.
  - c. The policy shall provide thirty (30) days notice of cancellation to the County.
  - d. The VENDOR or SUB-VENDOR shall name the County as an additional insured.
4. Builder's Risk
- a. Should the VENDOR'S services include renovation or new construction, a builder's risk policy insuring the full amount on a replacement cost basis, including soft costs, of the renovation or new construction is required and a Certificate of Insurance evidencing the full limit shall be provided to the County.
  - b. The builders' risk shall include the County as an additional insured.
5. Installation Floater
- a. Should the VENDOR'S services include installation of equipment into real property, VENDOR shall purchase full replacement cost coverage in the form of an installation floater to cover said property until installed.
6. Pollution Liability

- a. VENDORS shall generally not be required to carry pollution liability coverage insurance.
- b. The County reserves the right to require a VENDOR to carry adequate pollution liability coverage insurance.
  - i. This determination will be assessed on a project-by-project or VENDOR-by-VENDOR basis.
  - ii. Either the Board of Commissioners or department head can make this determination.

7. Cyber Liability

- a. Should any of the VENDOR's services involve any one or more of the following services, VENDOR shall carry cyber liability in an amount not less than \$2,000,000 each claim, \$2,000,000 annual aggregate:
  - i. Payroll services;
  - ii. Employee benefits including retirement plans, health insurance and/or consulting, human resource services, third party administrators;
  - iii. Hardware, software, or other IT services;
  - iv. Legal services that include the handling, storing, or transmitting of personal identifiable information; and
  - v. Medical providers

8. Flow-Down Clause.

- a. VENDOR shall use commercially reasonable efforts to include in its SUB-VENDOR's provisions, which impose obligations on SUB-VENDORS, that are consistent with all of the obligations imposed on the VENDOR in the agreement between the County and the VENDOR. In the event that a conflict exists between the terms of the agreement between the SUB-VENDOR and VENDOR and the terms of the VENDOR and/or County agreement, the terms of agreement between the VENDOR and County shall govern and control.

D. Procedures

1. Penalty for Non-Compliance

- a. Any VENDOR who is determined to be "non-compliant in-progress" by the County's Compliance Vendor shall be given notice of their non-compliance status. The VENDOR shall have thirty (30) days, from the date of notice, to

become compliant with all applicable insurance provisions mentioned in this exhibit. In the event that the VENDOR does not become compliant within the permitted thirty (30) days, the relationship between the VENDOR and the County may be terminated.

2. Appeal Process

- a. Should any VENDOR be determined to be “non-compliant” by the County’s Compliance Vendor the VENDOR and/or department head may initiate an appeal of that determination on a form provided by a representative from the Auditor’s office. The VENDOR’s appeal will be brought before an Advisory Committee to the Board of Commissioners (hereinafter “the BOC”) to determine whether an exemption should be made on behalf of the VENDOR. The Advisory Committee shall provide a recommendation to the BOC and the BOC shall approve or deny the Advisory Committee’s recommendation. The Advisory Committee shall consist of the County’s insurance consultant, the Safety and Risk Manager for the County, the appropriate department head or representative from the appropriate department, a representative from the Auditor’s office, and a representative of the County’s legal counsel.
- b. Should a department head and/or an elected official identify a VENDOR to be an appropriate candidate to submit an appeal, prior to being determined to be “non-compliant finalized” by the County’s Compliance Vendor, they may do so immediately upon identifying the particular VENDOR. This appeal will be brought before the Advisory Committee established above in section D(2)(a). The Advisory Committee will send their recommendation to the BOC and the BOC shall approve or deny the Advisory Committee’s recommendation.

3. All contracts shall provide the Certificates of Insurance to the County’s Compliance Vendor. The department head or elected official shall provide the Certificate of Insurance contact information form to the Hamilton County Auditor’s Office at [insurance.coi@hamiltoncounty.in.gov](mailto:insurance.coi@hamiltoncounty.in.gov) upon approval of the contract/agreement between the VENDOR and the County. The Certificates shall also name the following boards and committees as additional insureds if the contract applies to the property or activities of the following:

- a. The Hamilton County Sheriff;

- b. The Hamilton County Parks and Recreation;
- c. The Hamilton County Health Department;
- d. The Hamilton County Airport Authority;
- e. The Hamilton County Solid Waste Board;
- f. The Hamilton County Public Building Corporation (if applicable);
- g. The Hamilton County 4-H Department; and/or
- h. Hamilton County Drainage Board.

4. The Hamilton County Auditor's Office shall enter the VENDOR information into the County's insurance compliance system ("the Compliance System"). The Compliance System shall be constructed, operated, and maintained by the County's Compliance Vendor. Upon entering the VENDOR's information into the Compliance System, the Compliance Vendor shall do the following:

- a. Confirm with the agent and/or insurance company shown on the Certificate of Insurance, that the insurance set out in said Certificate is in full force and effect and includes the minimum coverages set out herein.

5. In the event the Certificate of Insurance does not reflect insurance, which are presently in force, the Compliance Vendor shall immediately notify the Hamilton County Auditor, who shall notify the department head and/or elected official. All purchases and/or services from the vendor shall be suspended until the Certificate of Insurance is brought into compliance pursuant to Section B (13) Penalty for Non-Compliance mentioned above. See rhetorical paragraph "Section B (13) Penalty for Non-Compliance."

6. In the event a VENDOR's information becomes invalid, expires, or does not meet the requirements of this Policy, the Compliance Vendor shall immediately notify, by email, the Hamilton County Auditor at [insurance.coi@hamiltoncounty.in.gov](mailto:insurance.coi@hamiltoncounty.in.gov). The

Compliance Vendor shall inform the VENDOR that the Certificate does not comply with County requirements and needs to be remedied within ten (10) business days of this notice. In the event, the Certificate is not provided in compliance with this Policy, after three (3) notifications, pursuant to Section B(13) the VENDOR will be deemed as “non-compliant finalized” and the contract with the VENDOR may be terminated after ten (10) business days and the County may prohibit subsequent contracts or agreements with the vendor. See rhetorical paragraph “Section B (13) Penalty for Non-Compliance.” If the contract between the County and the VENDOR is to be terminated by the BOC, the Auditor’s office shall provide a written notice to the appropriate department head five (5) business days prior to the contract being terminated.

7. In the event the Certificate of Insurance is not authentic or is not enforceable, a ten (10) days notice will be sent to the appropriate department head who shall suspend all activities and payments to the VENDOR until the Certificate of Insurance is authentic or enforceable.

E. Training

1. The terms of this policy shall be included in the Hamilton County Employee Handbook.
2. The Human Resource Department shall include training for all Department Heads and Elected Officials.
3. Mandatory Training shall be scheduled and conducted for all Hamilton County Employees who administer contracts described in this policy.
4. Any Department Head, Elected Official, or other employee who is responsible for any acts listed herein may be subject to disciplinary action as determined by the Commissioners.

This Amended Policy shall be effective retroactive to 1<sup>st</sup> day of December, 2020.

Approved this 21st day of December, 2020.

BOARD OF COMMISSIONERS  
OF HAMILTON COUNTY

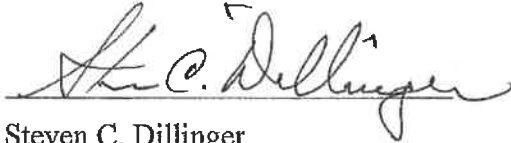
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Mark E. Heirbrandt



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Christine Altman



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Steven C. Dillinger

ATTEST:

  
Robin Mills, Auditor

### **SPECIAL INSTRUCTIONS**

Although the Special Instructions that follow are listed separately from the body of the contract, they are to be considered as instruction given "in addition to" those found in the Specifications portion of the contract. The intent of these Special Instructions, together with the Standard Specifications and Plans, is to provide for the complete construction of the project. Therefore, the bidder is advised to read and thoroughly understand the requirements found in this section and the Specifications section. Any further unanswered questions or discrepancies should be addressed to the Hamilton County Surveyor's Office for a determination.

### **STANDARD SPECIFICATIONS**

The following standard specifications shall not apply to this project:

1. Clearing on Page 15
2. Excavating on Page 16
3. Excavated Material on Pages 16 & 17
4. Pavement Replacement on Page 17
5. Inlets, Catch Basins, Breathers, Manholes, Junction Boxes on Page 17
6. Concrete, pages 17 and 18
7. Corrugated Metal Pipe on Page 18
8. Tile Drain Extension on Page 18
9. Drain Tile on Page 18
10. Tile Excavating and Backfill on Page 18
11. Seeding and Fertilizing on Pages 19 & 20

### **PROJECT DESCRIPTION**

This project includes work on a segment of the Section 1 Arm of the Anchorage Regulated Drain at the rear of Lots 10, 11, and 23 within the Anchorage Subdivision to stabilize the regulated drain from continued erosion. The project includes clearing, excavation, grading, installation of revetment rip-rap on geotextile fabric, and seeding.

### **AS-BUILT DRAWINGS**

As-built (record drawings) for this project shall be prepared by Christopher B. Burke Engineering, LLC [CBBEL]. The contractor shall call Mr. Jeffrey Fox at CBBEL when the project is ready for the as-built for survey. Grade checks will be performed by Hamilton County Surveyor's Office or CBBEL as needed to ensure work is on grade per the plans.



## **BENCHMARKS**

Benchmarks are shown on the Title Sheet of the Construction Plans. For additional benchmarks contact Mr. Jeffrey Fox of CBBEL at 317-266-8000.

## **BID AWARD**

THE HAMILTON COUNTY DRAINAGE BOARD RESERVES THE RIGHT TO HOLD THE BIDS FOR THIS PROJECT FOR UP TO NINETY (90) DAYS AFTER THE BIDS ARE OPENED.

## **BID FORM**

1. All items listed on the Bid Form shall be bid as Furnished and Installed.
2. Contractor must submit the Bid Forms included with the Bid Packet with his Bid. Alternate Bid Forms will not be accepted.

## **CLEAN UP**

The contractor shall, at all times, keep the premises free from accumulations of waste material or rubbish caused by his employees or work. At the completion of the work, Contractor shall remove all excess material from the site including, but not limited to, stone, silt fence, construction materials, rubbish, tools, equipment and surplus material from the project limits and shall leave the work area in a neat and presentable condition.

## **CLEARING**

1. GENERAL
  - a. The major clearing of trees and wood vegetation for this project has already been completed.
  - b. *Per General Note 6 of the Construction Drawings, any further/additional clearing along the access route and at the project site deemed by the Contractor to be necessary for the Work shall be reviewed and approved by the Inspector prior to removal.*
  - c. *Any additional tree clearing shall comply with Section 2 below.*
  - d. Contractor shall refer to Details OD-1 and OD-2 on Sheet 5 of the Construction Drawings.
  - e. The cost for this work shall be included in Line Item B-1 of the Bid Form.

## 2. TREE REMOVAL

- a. The contractor shall meet with each property owner prior to starting any clearing activity. During that meeting, the contractor shall discuss marketable timber and the salvage of any timber material for other uses such as firewood. The property owner has first rights to any marketable trees within the project limits. The property owner must relinquish those rights to the contractor in writing before the contractor could sell any marketable timber.
- b. In the event that the property owner identifies a tree that is to be saved as allowed in the General Conditions, the Contractor shall make all reasonable efforts to protect and preserve the tree from damage.
- c. In the event that the property owner identifies a tree or trees that are marketable and that such a tree or trees need to be removed by a timber harvesting company, the contractor shall provide notice to the property owner that such work must be completed before the deadlines associated with this project or such marketable tree(s) will be removed by this contract.
- d. Any tree clearing for this project shall be reviewed by and approved by the HCSO Inspector before performing any clearing operations.
- e. Property owners that request cleared material for firewood or other uses shall sign a waiver form per the clearing section of the specifications and submit the form to the Contractor. Contractor shall then submit the waiver form to the Inspector. Such material requested by the property owner shall not be processed (to include, but not be limited to: cutting limbs and branches to certain lengths, splitting, moving material beyond the limit of the easement) beyond that required for the project. The Contractor shall deliver such material to just outside the limits of the easement as Work progresses.
- f. If trees are to be cleared before October 1, 2024, prior to any felling or pruning, all trees that are 3" in diameter and greater shall be confirmed to not be actively used as a bat roost.
  - i. Such confirmation may require a field visit by a qualified individual that shall be coordinated by the Surveyor.

- ii. Trees identified by the qualified individual to remain shall not be removed or affected by the project.

### 3. BURNING

- a. Burning is not allowed on the project.

### 4. BURYING

- a. Burying of trash (items that would otherwise be considered trash such as soda cans or bottles; packaging materials; waste construction items; paint cans; empty containers of oil grease or other fluid material, etc.), removed asphalt pavement materials, metallic items or materials (including, but not limited to, old CMP piping or breathers) or plastic items or materials is not allowed under any circumstances within the project limits.
- b. Such materials must be removed and hauled offsite. The cost for this disposal shall be included in the cost of clearing.

### 5. GENERAL CLEARING NOTES

- a. All items scheduled for demolition, items to be removed, demolished structures, asphalt materials, and concrete materials shall be removed from the limit of the work and legally disposed of offsite by the Contractor.
- b. Contractor shall endeavor to protect from damage the existing trees within the project limits that are not directly affected by the Work.
- c. Contractor shall coordinate any branch/limb trimming with the HCSO Inspector before performing any branch/limb trimming.
- d. Tree Removal
  - i. Trees identified for removal that are not within the limits of excavation or regrading shall be cut at grade and the stump completely ground to a depth that severs the roots from the main root mass or to a depth of 10-inches, whichever is greater.
- e. Stump Removal
  - i. Any existing stumps that are not within the limits of excavation or regrading shall be cut at grade and the stump completely ground to a depth that severs the roots from the main root mass or to a depth of 10-inches, whichever is greater.

- ii. Any existing stumps within the limits of excavation for rip-rap shall be removed.
  - 1. All holes resulting from the stump removal work shall be backfilled with clean, compacted soil to the bottom level of the proposed rip-rap.
  - 2. No such holes will be allowed to remain outside of the working hours of the day the stump is removed (the hole shall be backfilled the same day the stump is removed).
- iii. Any existing stumps within the limits of regrading shall be removed.
  - 1. All holes resulting from the stump removal work shall be backfilled with clean, pulverized topsoil to the level of the adjoining grade.
  - 2. No such holes will be allowed to remain outside of the working hours of the day the stump is removed (the hole shall be backfilled the same day the stump is removed).
- f. Root Pruning
  - i. Per General Note 8 of the Construction Drawings, root pruning within the tops-of-bank shall conform to ANSI A300, Part 8, Root Management.
  - ii. ANSI A300 (Part 8)-2013 Root Management is included in this project manual for reference.

#### **CONSTRUCTION ENTRANCE**

1. Each main point of access to the Work areas from the public right-of-way selected by the Contractor requires the installation of a stable construction entrance.
2. The Construction Entrance indicated in the Construction Drawings is approximate.
3. The final location of the construction entrance shall be proposed by the Contractor with acceptance by the Inspector.
4. Entrances shall conform to Detail 3 on Sheet 5 of the Construction Drawings.
5. Contractor shall obtain any necessary permits for construction entrances.
6. Removal

- a. The access drive and any culverts shall be completely removed after final acceptance of the project by the Hamilton County Surveyor's Office.
  - b. The area shall be restored to grade that existed prior to the installation of the construction entrance.
  - c. The area shall be seeded.
7. The cost for this work shall be included in Line Item B-2.

**CONSTRUCTION ACCESS**

- 1. Construction access to the project site shall be from Tree Line Court between Lot 15 (10326 Treeline Court) and Lot 16 (10306 Treeline Court) and shall follow the Regulated Drain easement to the project site as shown on Sheet 4 of the Construction Drawings.
- 2. The access route shall not extend beyond/outside the limits of the regulated drain easement without approval from the Owner/Engineer.
- 3. Contractor shall use plywood or equivalent as a wearing surface along the access route.
- 4. Contractor shall take all reasonable care to protect existing improvements along the construction access route.
- 5. Contractor shall refer to the "Protection of Existing Facilities" Special Instructions for requirements related to protection and restoration of the construction access/route.
- 6. The cost for this work shall be included in Line Item B-3.

**CONSTRUCTION INSPECTION**

Mr. Jerry Liston of the Hamilton County Surveyor's Office shall do the construction inspection. He can be reached at 317-776-8495.

**CONSTRUCTION STAKING**

Construction staking shall be done by CBBEL. Please contact Mr. Jeffrey Fox at 317-266-8000.

**CONTRACTORS CLAIM DATES**

The claims will be submitted by 8:30 AM to the Hamilton County Surveyor's Office Administrative Assistant on or before the following dates.

May 24, 2024	August 9, 2024	October 25, 2024
June 7, 2024	August 30, 2024	November 8, 2024
June 28, 2024	September 13, 2024	November 17, 2024
July 12, 2024	September 27, 2024	December 19, 2024

**COORDINATION WITH PROPERTY OWNERS**

1. Contractor shall provide a minimum of 48-hours to each property Owner prior to work starting within the regulated drain easement on their property.
2. Contractor shall coordinate with property owners and the HOA for material staging locations and shall restore such areas to the existing condition or better at the completion of the Work.
3. If the Contractor makes arrangements with property owners to store and/or stage material and equipment outside the limits of the Regulated Drain Easement or the public right-of-way, the Contractor shall obtain formal approval from the property owner for such use of the property prior to mobilization. Contractor shall inspect and document the condition of the property with the property owner prior to mobilization. Contractor shall be responsible to restore the portion of the property used for construction equipment access, staging and storage to those conditions that existed at the time of inspection with the property owner.
4. Final approval of material and equipment staging locations shall also be obtained from the Inspector.
5. Contractor shall make all reasonable efforts to secure equipment and material staging locations from unauthorized access.

**DEWATERING**

1. The Contractor shall provide and maintain adequate dewatering equipment to remove and dispose of all surface and ground water entering excavations, trenches, or other parts of the work.
2. Each excavation shall be kept dry during subgrade preparation and continually thereafter until the structure to be built, or tile to be installed therein is completed to the extent that no damage from hydrostatic pressure, flotation, or other cause will result.
3. Surface water shall be diverted or otherwise prevented from entering excavated areas or trenches to the greatest extent practicable without causing damage to adjacent property.
4. The Contractor will be held responsible for the condition of any tile or conduit which he may use for drainage purposes, and all such tiles or conduits shall be left clean and free of sediment.

5. All necessary dewatering methods for site excavations shall be considered incidental to construction and the cost shall be included in the installation of the tile or structures.

#### **DRAINAGE EASEMENTS**

All work shall be performed within the existing public road right of way or existing easements. The limits of the existing easement are indicated on the Construction Drawings.

#### **EARTHWORK**

##### 1. General Notes

- a. The "Excavating" specification on Page 16 of this Project Manual shall not apply to this project.
- b. The "Excavated Material" specification on Pages 16 and 17 shall not apply to this project
- c. The work shall consist of all earthwork operations, including but not limited to excavation for rip-rap placement required by the Construction Drawings and off-site disposal of excess soil material generated by the Project.
- d. The excavation shall be at the slope and depth shown on the Construction Drawings or as directed by the Surveyor.
- e. Excavations shall comply with OSHA Construction Industry Standards (29CFR Part 1926) Subpart P; Excavations, Trenching and Shoring. All excavation shall be completed and maintained in a safe and stable condition throughout.
- f. IOSHA Regulations 29 C.F.R. 1926, Subpart B are hereby incorporated with the contract documents. The Contractor shall incorporate the trench safety requirements as set out in the above mentioned regulations and such material, equipment, etc. required, shall be included in the cost of tile installation.
- g. NO MECHANIZED EQUIPMENT SHALL BE STAGED, STORED OR OPERATED IN FLOWLINE OF DITCH.
- h. All work shall match the existing grades at the upstream and downstream limits of the project.
- i. The cost for earthwork, including off-site soil disposal, shall be included in Line Item B-5 of the Bid Form.

##### 2. Rip-Rap Areas

- a. For rip-rap installations, the width of the area to install and key in the material shall be no wider than

that specified in the details on the Construction Drawings.

3. Finish Grading

- a. Finish Grading shall conform to the "Final Grading" Special Instruction.

4. Excess Material

- a. All excess general soil material generated from the work shall be legally disposed of off-site by the Contractor.

**EXISTING CONDITIONS**

1. The CONTRACTOR shall verify the elevations and measurements of all points where new construction is to match existing conditions prior to the commencement of any construction activities.
2. No direct payment shall be made for this work but the cost thereof shall be included in the costs of the other items of the contract.

**EXISTING MONUMENTS**

1. *Contractor shall protect any lot corner monumentation evident within the project limits.*
2. In the event that a lot corner monument will be affected by the work, contractor shall notify Inspector immediately.
3. *Contractor shall not remove or otherwise affect the monument until the Hamilton County Surveyor's Office surveys/locates the monument so that it may be reset after the work is completed.*
4. After the monument has been located, work in the area may continue. The monuments will be reset by the Hamilton County Surveyor's Office after the work is complete. The work will be performed by Brian Rayl at 317-776-8495.

**FINAL GRADING**

1. Disturbed areas shall be smoothly graded.
2. All disturbed areas shall be left in a smooth manner, without ruts or surface irregularities that could contribute to concentrated surface flow or ponding water and such that maintenance equipment used to maintain the area, maintain the regulated drain, install and maintain a filter strip or lawn area, may be driven over all points of it with a reasonable degree of safety and economy.
3. No rocks, pieces of concrete, clay tiles or any other debris will be allowed to remain on the surface of the disturbed areas.



4. Use of rock screen or rake may be necessary to remove all rocks and debris prior to seed and straw placement.
5. All areas shall be restored to those elevations that existed prior to the Work and such that there is no ponding of water within the disturbed area.
6. The cost for this work shall be included in Line Item 4.

#### MAINTENANCE OF TRAFFIC

##### 1. General

- a. *No long term maintenance of traffic is expected for this project. In the event that short term traffic control is required, such traffic control shall conform to this specification.*
- b. Maintenance of traffic shall be the sole responsibility of the CONTRACTOR. Contractor shall provide all necessary signage, barricades, barrels, beacons, cones, markings, changeable message boards, and personnel (including flagmen) for maintenance of traffic. Access and traffic to all businesses, residences, for all postal deliveries and all emergency traffic such as police, fire, medical, etc. within the project limits, shall be maintained at all times. A minimum of one lane of travel shall be open at all times during working hours and traffic maintained with the use of flaggers. Two-way traffic shall be maintained during non-working hours.
- c. Unless otherwise directed, or permitted, the work specified shall be arranged and prosecuted in accordance with all applicable provisions of Sections 104.04, 107, 801 of the INDOT Standard Specifications and as outlined in the INDOT Work Zone Traffic Control Guidelines.
- d. The names and telephone numbers of the CONTRACTOR'S superintendent and one other responsible employee shall be furnished at the pre-construction conference. These employees shall be on call and available at nights, weekends, or during other non-working periods to repair or replace all traffic control devices, which may become damaged or inoperative.
- e. The number, size, location and wording for all signage, barricades, cones, barrels and markings associated with Maintenance of Traffic shall conform to the requirements of the INDOT Work Zone Traffic Control Guidelines, latest edition. A written maintenance of traffic plan shall be submitted to the Inspector for review by the Engineer prior to starting construction.

- f. All maintenance of traffic measures shall be in place before work commences.
- g. There shall be no individual payment for this item. The cost for Maintenance of Traffic shall be included in the cost of other items.

## 2. Flaggers

- a. Should the Contractor elect to maintain traffic during the Work, a minimum of one lane of travel shall be open at all times during working hours and traffic maintained with the use of flaggers. Two-way traffic shall be maintained during non-working hours.

### **MOBILIZATION/DEMOBILIZATION**

There is no individual payment for this item. The cost for this item shall be included in the cost of other items.

### **PAVEMENT, CURB, AND SIDEWALK RESTORATION**

#### 1. General

- a. All asphalt and concrete surfaces affected by the work shall be repaired when the work is complete.
- b. Full sections of existing curb and sidewalk damaged by the work shall be replaced.
- c. Each section of existing curb and sidewalk damaged by the work shall be saw cut at the nearest joint past the damaged section.
- d. All work shall match the appearance of the existing improvements as nearly as possible.

#### 2. Curb Repair

- a. Contractor is to replace any sidewalk damaged by the Work per the standards of the City of Fishers.

#### 3. Sidewalk Repair

- a. Contractor is to replace any concrete curb damaged by the Work per the standards of the City of Fishers.

- 4. There shall be no individual payment for this item. The cost for Pavement, Curb, and Sidewalk Restoration shall be included in the cost of other items

### **PERMITS**

- 1. Permit LRL-2021-01102-sjk, dated May 7, 2024 was obtained from the US Army Corps of Engineers and is on-file in the Surveyor's Office.
- 2. Contractor shall be responsible for obtaining any construction access permits necessary for this project.

## **PRE-CONSTRUCTION MEETING**

This meeting shall take place at least seven (7) days prior to the commencement of the construction activities and no later than two (2) weeks after award of contract. The scheduling and notification of such meeting shall be the responsibility of the County Surveyor's Office. Those invited shall be: County Surveyor or his representative, Contractor, Project Inspector, City of Fishers, representative of Utilities in project area and other interested parties.

## **PROJECT START DATE**

Construction may begin after the pre-construction conference.

## **PROTECTION OF EXISTING FACILITIES**

On this project there are existing utility lines, structures and assemblies that are to remain in place. The CONTRACTOR shall take care that these structures are not damaged. If any of these structures are damaged, the CONTRACTOR shall be required to repair them at his own expense.

### **1. General**

- a. There is no individual payment for this item. The cost for this item shall be included in the cost of other items.
- b. The Contractor shall take the necessary steps and actions to determine the exact location of underground utilities and facilities, and shall exercise sufficient care during construction to prevent damage to said utilities and facilities.
- c. Indiana Underground Plant Protection must be contacted for underground utility locations. You must call Indiana Underground Plant Project at 811. You must call at least "two (2) full working days" in advance of working and have a representative of the utility present during the excavation over and adjacent to its facility.
- d. Contractor shall coordinate the location of any private installations within the easement with the property owner. Such installations include, but are not limited to: irrigation lines, invisible dog fences and underground power for lighting systems on the lot. The Contractor shall be responsible to restore the service to such installations to a proper and working order at the completion of the Work if such installations conflict with the Work. Contractor shall minimize the duration of service loss. Remove any

sprinkler/irrigation systems or invisible fence in the area of construction and replace/reconnect at the completion of construction. Sprinklers shall be temporarily capped until the system can be re-installed.

- e. If it is necessary to disconnect a water, sanitary sewer, gas, telecomm, power or other utility main or utility lateral/service for the Work, the Contractor shall notify the HCSO and affected property owner immediately. Contractor shall minimize the duration of service loss and shall be responsible to coordinate the restoration of service after work at the crossing is complete with the Utility Company if it is the responsibility of the Utility to restore the service. The Contractor shall be responsible to restore the service in the event that restoration of such service is not the responsibility of the Utility. Line items for utility service/laterals are included in the Bid Form for this project. In the event that restoration of such service is the responsibility of the Utility, the Contractor shall not invoice the HCSO for any portion of that line item and the Contract Price shall be reduced by 100% of the value of that line item through a Change Order.

## 2. Public Utilities

- a. If, during the course of construction, it becomes necessary to relocate any existing sewer main, water main, gas main, telephone cable or conduit, cable television, or electric line, it shall be the responsibility of the utility company involved to make the necessary relocation. However, the Contractor shall assume all risk and liability for any inconvenience, delay, or damage sustained by him due to any interference from the said underground utility or the operations of moving them. The CONTRACTOR shall coordinate with the utility in order to expedite said work.
- b. Damage to any of the existing public utility facilities during the project caused by the CONTRACTOR'S operations or equipment, shall be repaired by the CONTRACTOR at no expense to the Contract. This includes sewer, water, gas, electric, telephone, cable, etc. and includes facilities within proposed storm sewer trenches.

### 3. Existing Tile, Drain or Other Connection

- a. Any existing field tile or other drainage piping (private drains, yard drains, roof drains, sump pump discharges) connected to the existing drain, crossed by the new drain, encountered and affected by the scope of work specified within the Contract Documents shall be given a positive outlet in accordance with HCSO Detail O-1 or connected to the new piping system in accordance with HCSO Detail O-3.
- b. Any such outlets shall be documented to include the station, diameter, pipe material and invert and provided to the Inspector.
- c. Any existing field tile or other drainage piping damaged by the Contractor's operations shall be replaced by the Contractor at his own expense.

### 4. Pavement, Curb, Sidewalk, Driveway

- a. The Contractor shall take all necessary precautionary measures, and perform the work in such a manner as to adequately protect and safeguard the existing pavement, curbing, sidewalk, pavement surface, and walk surface to remain in place from any damage due to such operations.
- b. The Contractor's attention is also directed to the fact that the operation of crawler type construction equipment on those portions of the surface to remain in place will not be permitted and the operation of overweight or oversize equipment in those areas shall be governed by State and Local Laws and Regulations.
- c. Any damage portion in surface, or pavement and surface removed in excess of that required for the construction as set out in the plans, shall be satisfactorily replaced or repaired by the Contractor at his own expense.
- d. The Contractor's attention is specifically directed to all applicable Articles of Section 107 in regard to his own responsibility under this contract.

### 5. Easement Area

- a. Contractor shall protect all lawn and landscaping areas within the easement, within the right of way, and along the construction access route.

- b. At the completion of the project, Contractor shall restore such areas to the condition that existed prior to starting the work, or better.
- c. Contractor shall repair any ruts resulting from the construction activity.

#### **QUESTIONS**

This project is a Hamilton County Surveyor's Office project. All RFI's, clarifications, and technical questions shall be directed to Mr. Gary Duncan or Mr. Jerry Liston of the Hamilton County Surveyors Office. They may be reached at 317-776-8495.

#### **RIP RAP**

##### 1. General

- a. The cost for this work is included in Line Item B-6 of the Bid Form.
- b. Filter Fabric shall be provided under all rip-rap that is placed.

##### 2. Material

- a. Rip Rap shall be Revetment Rip-Rap per the INDOT Standard Specifications.
- b. Reference Section 900 for gradation.
- c. The rip rap shall be at least D50 = 6" inches in size.

##### 3. Installation

- a. Rip Rap shall be placed at the given locations indicated on the Construction Drawings.
- b. Contractor shall refer to Sheet SP1 of the Construction Drawings for profile and typical cross sections.
- c. The rip rap shall be placed at least 18" inches in depth and keyed into place so the top of the rip rap is flush with the bottom and sides of the ditch/adjacent grade.
- d. Between Stations 1+56.16 and 1+58.16 and between Stations 3+05.83 and 3+07.83, rip-rap shall be placed to a depth of at a depth of 42-inches as shown on Sheet SP1 of the Construction Drawings.

#### **ROCK CHECK DAM**

1. A rock check dam is required at the downstream end of the project near station 3+10 (approximately) as shown on Sheet 4 of the Construction Drawings.
2. Rock check dams shall conform with Detail 2 on Sheet 5 of the Construction Drawings.
3. Removal

- a. The rock check dam is to be removed at such time as seeded areas upstream of the rock check dam have been established.
  - b. After removal, the area occupied by the rock check dam shall be seeded in accordance with the Seeding and Fertilizing Special Instruction.
4. The cost for this work is included in Line Item B-4 of the Bid Form.

#### **SALES TAX**

5. Owner is exempt from payment of sales and compensating use taxes of the State of Indiana and of cities and counties thereof on all materials to be incorporated into the work.
6. Owner will furnish the required certificates of tax exemption to Contractor for use in the purchase of supplies and materials to be incorporated into the work.
7. Owner's exemption does not apply to construction tools, machinery, equipment, or other property purchased by or leased by Contractor, or to supplies or materials not incorporated into the work.

#### **SEEDING AND FERTILIZING**

##### 1. General

- a. The Seeding and Fertilizing section of the General Provision (page 19 and 20) shall not apply to this project.
- b. All disturbed areas shall be smoothly graded and seeded.
- c. All seeding areas shall be mulched.
- d. The cost for this work shall be included in Line Item B-7 of the Bid Form.

##### 2. Materials

###### a. Mulch

- i. Material shall consist of clean (weed free) wheat straw.

###### b. Seed Mix

- i. The seed mix listed in the "Seeding and Fertilizing" section will not be used for this project.
- ii. The seed mix indicated in Detail 1 on Sheet 5 of the Construction Drawings shall be used in all instances of this project.

##### 3. Application Rates

- a. Refer to Detail 1 on Sheet 5 of the Construction Drawings for seed application rates.

- b. Mulch shall be applied such that there is 1" of clean wheat straw on all seeded areas per Permanent Vegetation Note 5 on Sheet 5 of the Construction Drawings.

#### 4. Seeding

- a. Seed and fertilizer shall be spread with a broadcast type seeder.
- b. Prepare a firm seed bed with a cultipacker or cultipacker type seeder.
- c. Work the seed into the soil  $\frac{1}{4}$  to  $\frac{1}{2}$  inch deep.
- d. All disturbed areas where rip-rap is not installed shall be seeded twice.
  - i. The first seeding will occur the same day that final grading is completed.
    - 1. Seeding shall occur while the ground is still moist.
  - ii. The second seeding shall be applied prior to the final inspection and shall be only for those areas where the grass from the first seeding has not germinated and established into an abundant and uniform stand of grass.

#### 5. Watering

- a. All seeded areas shall be adequately watered by the Contractor for the duration of the project and until an acceptable stand of grass is established.
  - i. Climatic conditions will warrant the amount of water and frequency of application.
  - ii. For the basis of this Bid, watering shall consist of 1" of water applied to the seeded area per week for a period of 4 weeks (4 applications)

#### 6. Guarantee

- a. The Contractor shall guarantee a stand of grass; and if through the actions of the elements, seasons, animals or man the seed does not grow, the Contractor shall reseed, re-fertilize and do that which is required to establish an abundant and uniform stand of grass in the areas indicated for seeding on the construction plans.
- b. Final acceptance of the project shall not be made until the requirements of this special instruction have been satisfied.



## STORM WATER POLLUTION PREVENTION DURING CONSTRUCTION

### 1. General

- a. This work shall consist of placing permanent and temporary erosion control features in accordance with the construction plans.
- b. Adequate erosion protection measures shall be provided during construction and strictly adhere to all applicable laws, rules and regulations regarding erosion control.
- c. Temporary erosion control features shall be in accordance with Section 108 and shall be maintained until permanent erosion control features are placed.
- d. Measures shall be placed at the earliest possible stage of the construction operation in and removed when no longer required.
- e. All temporary soil/topsoil stockpiles that will remain on-site for more than that days operation/work shall be protected with silt fence at the toe of the stockpile around the full perimeter of the stockpile.
- f. Each main point of access to the Work areas from the public right-of-way selected by the Contractor requires the installation of a stable construction entrance.

### 2. Erosion Control Measures

- a. The Contractor shall provide adequate erosion and sediment control measures during construction such as, but not limited to:
  - i. Construction Entrance
  - ii. Construction Access Route with Wearing Surface
  - iii. Rock Check Dam
  - iv. Rip-Rap on geotextile fabric
  - v. Seeding
  - vi. Straw Mulch
  - vii. \*Additional erosion control measures may be required by the Inspector to protect the downstream waters from receiving sediment originating from the site.

### 3. Inspection

- a. All erosion and sediment control measures as specified in the plans shall be inspected by the Contractor.
- b. An inspection of erosion control measures in place shall be made at least once every seven (7) days and after each rain event of one-half inch ( $\frac{1}{2}$ -inch) or greater. The inspection shall include:

- i. The identification of areas contributing to storm water discharges associated with construction activity.
  - ii. Confirmation that all erosion control devices are installed as specified and that they are operating properly.
  - iii. The Contractor's vehicles and work area shall be inspected to ensure that solid and liquid wastes are being properly disposed of and not allowed to be discharged into storm water runoff.
- c. A report shall be completed summarizing the results of each inspection. The inspection report provided by the Inspector at the preconstruction meeting shall be used to record information obtained from field investigations of the erosion control measures. Copies of the reports shall be submitted to the Inspector with each invoice. The Contractor is responsible for keeping the inspection sheets in a log book for review by IDEM, IDNR or ACOE.

#### 4. Maintenance During Construction

- a. All erosion control measures shall be maintained throughout the project and until such time as the disturbed areas have been completely stabilized or other provisions have altered the need for these measures.

#### 5. Removal

- a. All temporary erosion and sediment control practices shall be removed and disposed of within thirty (30) days after the final site stabilization is achieved or after temporary practices are no longer needed.

#### **STREET CLEANING/DUST CONTROL**

1. The CONTRACTOR shall provide effective dust control throughout the project.
2. Perimeter roadways shall be kept clean from soil material deposited on the roadway as a result of the work associated with this project.
3. Loader-mounted pick-up, power sweepers, or other types of pull type models shall be used for street cleaning.
4. Street cleaning shall also be performed prior to the pre-final meeting as directed by the Surveyor.
5. Naturally occurring conditions, out of the control of the owner, that cause more dust control than normal shall not be a valid reason for request of payment for dust control.

6. Street cleaning and Dust Control will not be paid directly, but shall be included in the cost of various items of the contract regardless of the amount of times this operation is reasonably requested.

#### **TEMPORARY FACILITIES**

1. There are no field office requirements for this project.
2. Toilet facilities shall be provided at the discretion of the Contractor.
  - a. The cost for any toilet facilities shall be included in the cost of other items.

#### **UTILITY LOCATION AND NOTIFICATION**

1. All utility locations and notifications are the responsibility of the Contractor.
2. The Drawings indicate information on underground and surface utilities or facilities in the project area. This information may not be complete and/or may not accurately reflect the actual size, location or depth of the utilities or facilities. The Surveyor or Drainage Board shall therefore not be held responsible for utilities whose size, location, or depth differs from the information on the Drawings.
3. Consequently, the Contractor shall contact the owners of the various utilities or facilities in the project area prior to the start of construction for the location of the various utilities or facilities.

#### **WORKING HOURS**

1. Permissible working hours for this project are Monday through Friday from 7:00 a.m. to 6:00 p.m., excluding legal holidays.
  - a. Construction operations outside of these working hours will not be permitted without the written consent of the Owner or Inspector.
2. No night work requiring the presence of an Engineer or Inspector will be permitted, except in case of great emergency, and then only to such extent as is absolutely necessary, and with written approval of the inspector, provided that this clause shall not operate in case of a crew organized for regular and continuous night work, and on such work which, in the opinion of the Engineer, can only be performed satisfactorily at night.
3. Weekend work will be only with the written consent of the Owner and Inspector and to such extent as he may judge to be necessary.

4. Any work necessary to be performed after regular working hours, or on weekends and legal holidays, shall be performed without additional expense to the Owner.

#### **WORKING UNDER POWER LINES**

For all work under power lines:

1. The Contractor shall be aware of the power lines and use caution while working under them.
2. Be aware of the potential for electrostatic discharge.
3. Contractor shall limit time working under the power lines to that time necessary for the work.
4. Contractor is advised to ground all equipment.
5. Contractor shall not park or store equipment or materials under the power lines.

EXPERIENCE QUESTIONNAIRE

The signatory of this questionnaire guarantees the truth and accuracy of all statements and of all answers to interrogatories hereinafter made.

- 1. How many years has your organization been in business as a General Contractor under your present business name? \_\_\_\_\_
- 2. How many years experience in \_\_\_\_\_ construction work has your organization had:
  - (a) As a General Contractor? \_\_\_\_\_
  - (b) As a sub-contractor? \_\_\_\_\_
- 3. For what cities have you performed work and to whom do you refer? \_\_\_\_\_  
\_\_\_\_\_
- 4. For what counties have you performed work and to whom do you refer? \_\_\_\_\_  
\_\_\_\_\_
- 5. For what State bureaus or departments have you performed work and to whom do you refer? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- 6. Have you ever performed any work for the U.S. Government? \_\_\_\_\_  
If so, when and to whom do you refer? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

7. What is the construction experience of the principal individuals of your organization?

Individual's Name	Present Position	Years of Const. Exp.	Magnitude And Type	In What Capacity
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

\_\_\_\_\_  
Signed



TO: HAMILTON COUNTY DRAINAGE BOARD

The following is for the Anchorage Drain Bank Stabilization

Base Bid					
Line Item	Item Description	Unit	Quantity	Unit Cost	Total Cost
B-1	Clearing	LS	1		
B-2	Construction Entrance	EA	1		
B-3	Construction Access	SYS	530		
B-4	Rock Check Dam	EA	1		
B-5	Excavation and Soil Disposal	CYS	125		
B-6	Class 1 Rip-Rap on Geotextile	TON	180		
B-7	Mulched Seeding	Acre	1		
Total Base Bid					

Supplemental Bid

Item Description	Unit	Unit cost
<b>RCP</b>	<b>(Installed)</b>	
12"	LF	
15"	LF	
18"	LF	
21"	LF	
24"	LF	
27"	LF	
30"	LF	
33"	LF	
36"	LF	
<b>CMP 12 GA</b>	<b>(Installed)</b>	
6"	LF	
8"	LF	
10"	LF	
12"	LF	
18"	LF	
21"	LF	
24"	LF	
30"	LF	
36"	LF	
<b>Animal Guard</b>		
6"	EACH	
8"	EACH	
10"	EACH	
12"	EACH	
15"	EACH	
18"	EACH	
21"	EACH	
<b>HDPE, Dual Wall perforated (Installed)</b>		
6"	LF	
8"	LF	
10"	LF	
12"	LF	
15"	LF	
18"	LF	
<b>HDPE, Dual Wall non-perf. (Installed)</b>		
6"	LF	
8"	LF	
10"	LF	
12"	LF	
15"	LF	
18"	LF	

Item Description	Unit	Unit cost
<b>HDPE, Dual Wall Tees</b>		
6"	EACH	
8"	EACH	
10"	EACH	
12"	EACH	
15"	EACH	
18"	EACH	
<b>HDPE, Dual Wall Internal Coupler</b>		
6"	EACH	
<b>HDPE, Dual Wall External Coupler</b>		
8"	EACH	
10"	EACH	
12"	EACH	
15"	EACH	
18"	EACH	
<b>SDR 35 PVC (Installed)</b>		
6"	LF	
8"	LF	
10"	LF	
12"	LF	
15"	LF	
18"	LF	
<b>SDR 35 PVC TEES</b>		
6"	EACH	
8"	EACH	
10"	EACH	
12"	EACH	
15"	EACH	
18"	EACH	

<b>TILE CONNECTIONS (Installed)</b>		
4"	EACH	
6"	EACH	
8"	EACH	
10"	EACH	
12"	EACH	



Supplemental Bid Cont...

Item Description	Unit	Unit cost
<b>Machine Prices per hour</b>		
Hydraulic Excavator		
5/8 Cu. Yd	HOOR	
36" Bucket	HOOR	
3/4 Cu. Yd Dredge Bucket	HOOR	
Bulldozer under 100 hp	HOOR	
Bulldozer over 100 hp	HOOR	
Backhoe w/loader	HOOR	
Grader	HOOR	
Tractor	HOOR	
Pumps	DAY	
Compactor	DAY	
Mini-Excavator	HOOR	
Bobcat	HOOR	
Bulldozer	HOOR	
<b>Trucks</b>		
Pickup to 1 ton	HOOR	
1 ton	HOOR	
Single Axle	HOOR	
Tandem or Tri-Axle	HOOR	
<b>Material (Installed)</b>		
Concrete - 3000 PSI	CYS	
Concrete - 4000 PSI	CYS	
Flowable Fill	CYS	
Graded Rip Rap(7"-9")	CYS	
Fill Sand	TON	
Washed #8 Stone	TON	
Unwashed #8 Stone	TON	
#2 Stone	TON	
#4 Stone	TON	
Tordon for Stump Treatment	GAL	
<b>Labor per hour</b>		
Supervisor	HOOR	
Machine operator	HOOR	
Labor	HOOR	

Item Description	Unit	Unit Cost
<b>Erosion Control Materials (Installed)</b>		
Indiana Seed Co. or Equiv.		
#18 Lawn Mix	LBS	
#6 Rough Mix	LBS	
Wheat	LBS	
Annual Rye	LBS	
12-12-12 Fertilizer	LBS	
Hydro-Seed	SQ. FT.	
Straw Bales	EACH	
7' Steel Fence Posts	EACH	
Silt Fence	LF	
Dirt Fill	CYS	
Erosion Control Blanket SC-150	SYS	
Erosion Control Blanket SC-250	SYS	
Erosion Control Blanket P-300	SYS	
Erosion Control Blanket C-125	SYS	

Employment Eligibility Verification Certification

This Certification is submitted by the undersigned, \_\_\_\_\_, as part of the contract with Hamilton County for the project known as \_\_\_\_\_ entered into on the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_. The undersigned affirms under the penalties of perjury that the Contractor does not knowingly employ an unauthorized alien.

The Contractor shall enroll in and verify the work eligibility status of all newly hired employees through the E-Verify program as defined in IC 22-5-1.7-3. The Contractor is not required to participate if the Contractor is self-employed and does not employ any employees.

The Contractor shall not knowingly employ or contract with an unauthorized alien. The Contractor shall not retain an employee or contract with a person that the Contractor subsequently learns is an unauthorized alien.

The Contractor shall require all subcontractors who perform work under its contract, to certify to the Contractor that:

1. The subcontractor does not knowingly employ or contract with an unauthorized alien;
2. The subcontractor has enrolled and is participating in the E-Verify program. The Contractor agrees to maintain this certification at least two years after the term of a contract with a subcontractor.

The County may terminate the contract if the Contractor fails to cure a breach of this provision no later than thirty (30) days after being notified by the County.

The terms of this Certification shall be incorporated within the contract between the Contractor and the County.

Witness this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

Contractor: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

Signature: \_\_\_\_\_, \_\_\_\_\_  
Printed: \_\_\_\_\_ Title



DRAIN RECONSTRUCTION CONTRACT

THIS AGREEMENT by and between the HAMILTON COUNTY DRAINAGE BOARD, hereinafter referred to as "BOARD" and \_\_\_\_\_, hereinafter referred to as "CONTRACTOR".

WITNESSETH:

THAT WHEREAS, Contractor is the successful bidder for the reconstruction of the **Anchorage Drain, Bank Stabilization Project** as ordered by the Board, it is now agreed by and between the Parties as follows:

1. The Contractor agrees to perform the work under the supervision of the Surveyor or his representative, in accordance with the plans, Instructions to Bidder, General Provisions, Special Instructions, profile and cross sections made by the Board, which are incorporated herein by reference as fully as if the same were set out.

2. The Board agrees to pay Contractor the agreed sum of \$\_\_\_\_\_ payment to be made according to law.

3. The Contractor agrees that all work under this contract shall be completed on or before the completion date set out in the General Provisions.

4. It is understood and agreed that fifteen Percent (15%) of the contract price herein 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 sub-contractors.]

5. The Contractor agrees and binds itself to pay all bills for labor, materials and all services whatsoever that shall be used in this reconstruction or otherwise incorporated in this work and to save the Board and the landowners affected harmless from all such bills.

6. This contract also incorporates by reference a certain contractor's bid dated **July 22, 2024** as fully as if the same were set out completely herein.

7. It is understood that the Board contracts in its official capacity and that the members thereof shall not in any event be personally liable under this agreement.

IN WITNESS WHEREOF THE PARTIES HAVE SET THEIR HANDS THIS  
\_\_\_\_\_ DAY OF \_\_\_\_\_ 20\_\_\_\_.

HAMILTON COUNTY DRAINAGE BOARD

\_\_\_\_\_  
PRESIDENT

\_\_\_\_\_  
MEMBER

\_\_\_\_\_  
MEMBER

BY \_\_\_\_\_  
CONTRACTOR

TO: HAMILTON COUNTY DRAINAGE BOARD

RE:

As Contractor on the contract awarded on \_\_\_\_\_  
for the \_\_\_\_\_ Drain, I hereby notify  
the Hamilton County Drainage Board that all expenses incurred  
for labor and materials have been paid in full.

The foregoing is true under the penalties of perjury.

BY: \_\_\_\_\_  
Contractor-Print

\_\_\_\_\_  
Contractor-Signature

STATE OF INDIANA, HAMILTON COUNTY, ss:

Subscribed and sworn to before me, the undersigned, a Notary  
Public in and for said County this \_\_\_\_\_ day  
of \_\_\_\_\_ 20\_\_\_\_\_.

Witness my hand and official seal.

My Commission expires \_\_\_\_\_ Notary Public  
\_\_\_\_\_ County of Residence



American National Standard

*for Tree Care Operations –  
Tree, Shrub, and Other Woody Plant  
Management – Standard Practices  
(Root Management)*







American National Standard  
for Tree Care Operations –

*Tree, Shrub, and Other Woody Plant Management –  
Standard Practices (Root Management)*

Secretariat  
**Tree Care Industry Association, Inc.**

**Published by**  
Tree Care Industry Association, Inc.  
136 Harvey Road – Ste 101  
Londonderry, NH 03053  
800-733-2622  
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**Foreword** This foreword is not considered part of American National Standard *A300 (Part 8)-2013 Root Management*.

ANSI A300 Standards are divided into multiple parts, each focusing on a specific aspect of woody plant management (e.g. Pruning, Soil Management, Supplemental Support Systems, etc).

These standards are used to develop written specifications for work assignments. They are not intended to be used as specifications in and of themselves. Management objectives may differ considerably and therefore must be specifically defined by the user. Specifications are then written to meet the established objectives and must include measurable criteria.

ANSI A300 standards apply to professionals who provide for, or supervise the management of, trees, shrubs, and other woody landscape plants. Intended users include businesses, government agencies, property owners, property managers, and utilities. The standard does not apply to agriculture, horticultural production, or silviculture, except where explicitly noted otherwise.

This standard has been developed by the Tree Care Industry Association (TCIA), an ANSI-accredited Standards Developing Organization (SDO). TCIA is secretariat of the ANSI A300 standards, and develops standards using procedures accredited by the American National Standards Institute (ANSI).

Consensus for standards writing was developed by the Accredited Standards Committee on Tree, Shrub, and Other Woody Plant Management Operations – Standard Practices, A300 (ASC A300).

Prior to 1991, various industry associations and practitioners developed their own standards and recommendations for tree care practices. Recognizing the need for a standardized, scientific approach, green industry associations, government agencies and tree care companies agreed to develop consensus for an official American National Standard.

The results – ANSI A300 standards – unify and take authoritative precedence over all previously existing tree care industry standards. ANSI requires that approved standards be developed according to accepted principles, and that they be reviewed and, if necessary, revised every five years.

TCIA was accredited as a standards developing organization with ASC A300 as the consensus body on June 28, 1991. ASC A300 meets regularly to write new, and review and revise existing, ANSI A300 standards. The committee includes industry representatives with broad knowledge and technical expertise from residential and commercial tree care, utility, municipal and federal sectors, landscape and nursery industries, and other interested organizations.

Suggestions for improvement of this standard should be forwarded to: ANSI A300 Secretary, c/o Tree Care Industry Association, Inc., 136 Harvey Road - Suite 101, Londonderry, NH 03053.

ANSI A300 (Part 8)-2013 Root Management was approved as an American National Standard by ANSI on August 26, 2013. ANSI approval does not require unanimous approval by ASC A300.

*(Continued)*

The ASC A300 committee had the following members as of August 26, 2013:

*Dane Buell, Chair  
(SavATree, Inc.)*

*Bob Rouse, Secretary  
(Tree Care Industry Association, Inc.)*

**Organizations Represented**

*Alliance for Community Trees  
American Nursery and Landscape Association*

*American Society of Consulting Arborists*

*American Society of Landscape Architects  
Asplundh Tree Expert Company  
Bartlett Tree Expert Company*

*Davey Tree Expert Company*

*International Society of Arboriculture*

*Professional Grounds Management Society*

*Professional Land Care Network*

*Society of Municipal Arborists*

*Tree Care Industry Association  
USDA Forest Service*

*Utility Arborist Association*

**Name of Representative**

*Carrie Gallagher  
Warren Quinn  
Craig J. Regelbrugge (Alt.)  
Donald Godi  
Stephen Miller (Alt.)  
Ron Leighton  
Geoff Kempter  
Peter Becker  
Dr. E. Thomas Smiley (Alt.)  
Chris Klinas  
Grant Jones (Alt.)  
Dr. Richard Hauer  
Sharon Lilly (Alt.)  
Gene Pouly  
Michael Bova (Alt.)  
Alice Carter  
Tom Delaney (Alt.)  
Nolan Rundquist  
Gordon Mann (Alt.)  
Steve Mays Jr.  
Keith Cline  
Ed Macie (Alt.)  
William T. Rees  
Matthew Simons (Alt.)*

**Additional organizations and individuals:**

*Peter Gerstenberger (Observer)  
Andy Hillman (Observer)  
Myron Laible (Observer)  
Tim Johnson (Observer)  
Guy Meilleur (Observer)  
Beth Palys (Observer)  
Dr. Richard Rathjens (Observer)  
Richard Roux (NFPA-780 Liaison)  
Brittany Giffords (Observer)*

**ASC A300 Mission:** To develop consensus performance standards based on current research and sound practice for writing specifications to manage trees, shrubs, and other woody plants.

**ASC A300 Vision:** ANSI A300 standards will be the foundation for work specifications, training materials, quality protocols, and regulations for the management of trees, shrubs, palms, and other woody plants.

American National Standard  
for Tree Care Operations –

## Part 8 – Root Management

### Subclause 1.1 to 1.3 excerpted from ANSI A300 (Part 1) – *Pruning*

#### 1 ANSI A300 standards

##### 1.1 Scope

ANSI A300 standards present performance standards for the care and management of trees, shrubs, and other woody plants.

##### 1.2 Purpose

ANSI A300 performance standards are intended for use by federal, state, municipal and private entities including arborists, property owners, property managers, and utilities for developing written specifications.

##### 1.3 Application

ANSI A300 performance standards shall apply to any person or entity engaged in the management of trees, shrubs, or other woody plants.

### 80 – Root Management standards

#### 80.1 Purpose

The purpose of this standard is to provide industry consensus guidelines for root management and standards for writing specifications.

#### 80.2 Reasons for root management

The reasons for root management may include but are not limited to promoting tree health, stability, and longevity, and managing the interaction of tree roots with soil, infrastructure, property, and other plants. Root management practices for agriculture, horticultural production, or silvicultural purposes are exempt from this standard unless this standard, or a portion thereof, is expressly referenced in these standards for these other related areas.

### 80.3 Implementation

**80.3.1** Root management specifications should be written and administered by an arborist with related training and experience.

**80.3.1.1** Root management shall be implemented by a qualified professional, familiar with the practices and hazards associated with root management and the equipment used in such operations.

**80.3.1.2** Specifications for root management shall include objectives, scope of work, and timing.

**80.3.1.3** Specifications for root management should include, but are not limited to: objectives; treatment area; methods; materials; equipment; and, timing.

**80.3.2** Practices that minimize damage to roots shall be preferred (see Annex A).

### 80.4 Safety

**80.4.1** This performance standard shall not take precedence over applicable industry safe work practices.

**80.4.2** Personnel shall follow appropriate safe work practices.

**80.4.3** Performance shall comply with applicable Federal and State Occupational Safety and Health Administration (OSHA) standards, ANSI Z133, and other federal, state, and local regulations.

**80.4.4** The site shall be inspected for visible above-ground hazards prior to beginning any root management procedure.

**80.4.5** The location of utilities and other obstructions both below and above ground shall be taken into consideration prior to root management operations. Utilities and other obstructions include, but are not limited to: gas; electric; communications; sewer; drainage; and, signage.

**80.4.6** Job briefings shall be performed as outlined in ANSI Z133.

## 81 Normative references

ANSI A300 for Tree Care Operations – Tree, Shrub, and Other Woody Plant Management – Standard Practices, all Parts

ANSI Z60, Nursery stock

ANSI Z133 for Arboricultural Operations – Safety Requirements

ASTM A-475, Standard Specification for Zinc-Coated Steel Wire Strand

Federal Standard: FF-T-276b, Thimbles, Rope

29 CFR 1910, Occupational Safety and Health Standards (General Industry)<sup>1)</sup>

29 CFR 1910.268, Telecommunications<sup>1)</sup>

29 CFR 1910.269, Electric power generation, transmission and distribution<sup>1)</sup>

29 CFR 1910.331 - 335, Electrical safety-related work practices<sup>1)</sup>

29 CFR 1910, Subpart S – Electrical, §§ 1910.331 - 335, Safety-related work practices<sup>1)</sup>

<sup>1)</sup> Available from U.S. Department of Labor, 200 Constitution Ave. NW, Washington, D.C. 20210, or [www.osha.gov](http://www.osha.gov).

**82 Definitions** (Definitions are considered part of the ANSI A300 (Part 8)-2013 Root Management standard.)

**82.1 adventitious root:** Root arising from parts of the root or the stem.

**82.2 aggregate:** Materials such as sand, gravel, or rock, often used under paved surfaces, as back-fill, or for other purposes.

**82.3 arborist:** An individual engaged in the profession of arboriculture who, through experience, education and related training, possesses the competence to provide for, or supervise the management of, trees and other woody ornamentals.

**82.4 arborist trainee:** An individual undergoing on-the-job training to obtain the experience and the competence required to provide for, or supervise

the management of, trees and woody plants. Such trainees shall be under the direct supervision of an arborist.

**82.5 berm:** Soil added above grade for a specified purpose, such as a planting bed or barrier.

**82.6 callus:** Undifferentiated, non-lignified tissue, usually developed in response to wounding.

**82.7 crown:** Upper part of a tree, measured from the lowest branch, including all the branches and foliage.

**82.8 decay:** (v.) Decomposition of woody tissues by microorganisms. (n.) Wood that is decomposed.

**82.9 fill:** Soil, sand, gravel, rocks, or other material placed over the existing soil surface to raise the finished grade to some specified level.

**82.10 flare (trunk flare, root flare):** The area at the base of the plant's stem or trunk where the stem or trunk broadens to form roots.

**82.11 hardscape:** Built infrastructure such as pavement, sidewalks, curbing, storm drains, walls, and footings.

**82.12 hydraulic soil excavation:** The removal of soil using pressurized water.

**82.13 mitigation:** 1. Reducing or alleviating unfavorable conditions. 2. The process of diminishing risk.

**82.14 mulch:** A material applied to the soil surface to protect the soil, deter erosion, moderate soil temperature, conserve moisture, inhibit weeds; or improve soil structure.

**82.15 pneumatic soil excavation:** The removal of soil using pressurized air.

**82.16 qualified professional:** An individual possessing skills, experience, training, education, certificates, degrees, registration, certification, or licensing as needed to perform job tasks.

**82.17 radial trenching:** Removing soil and other material in trenches radiating from the trunk.

**82.18 root barrier:** A device designed to direct root growth.

**82.19 root channel:** An underground system



used to direct root growth and increase soil volume.

**82.20 root collar:** The transition zone between the flare and the root system.

**82.21 root collar examination:** The process of exposing and assessing the root collar.

**82.22 root cutting:** Severing roots non-selectively.

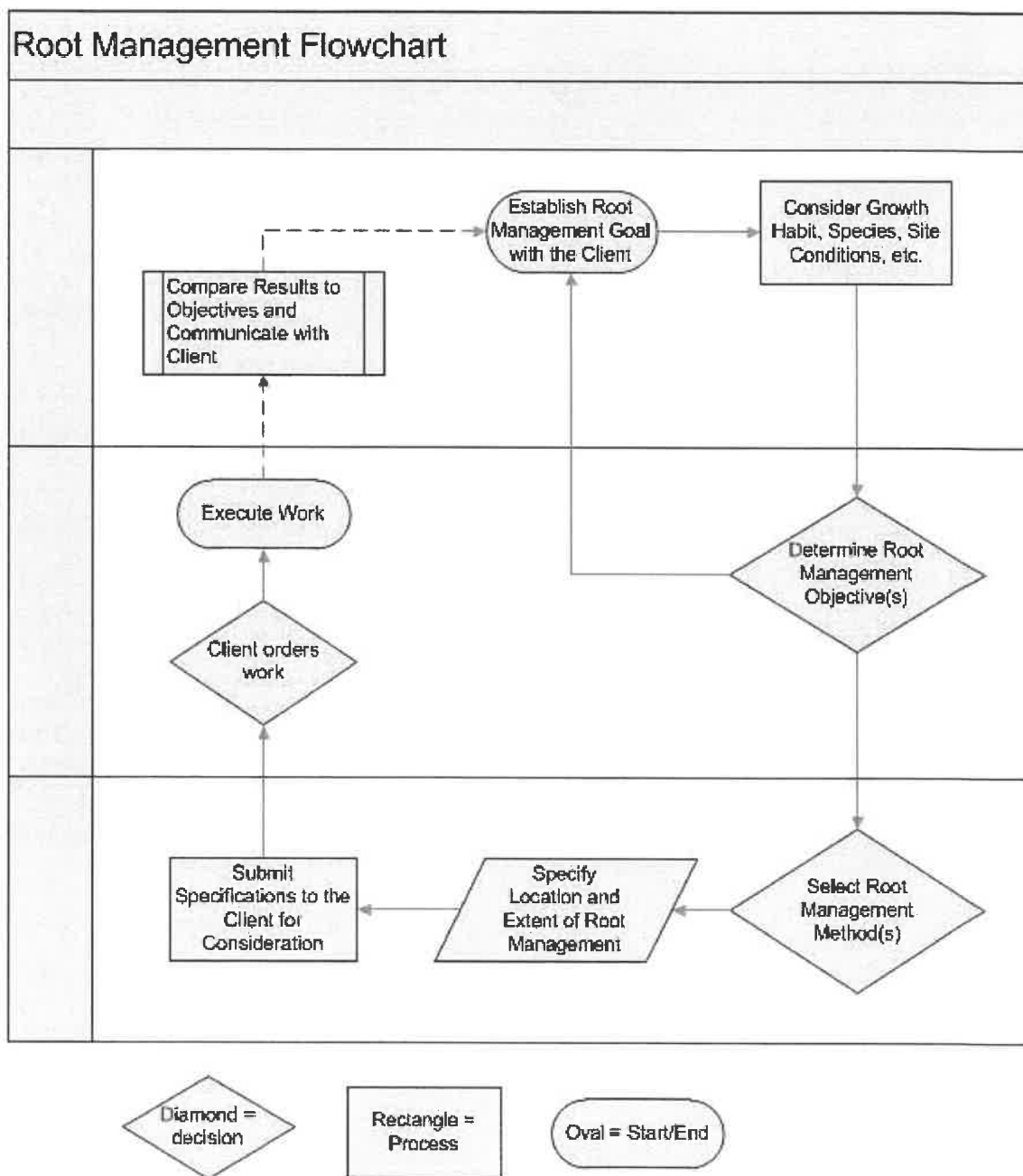
**82.23 root pruning:** Severing roots selectively.

**82.24 root, buttress:** A major lateral root radiating from the base of the trunk.

**82.25 root, circling:** A root that encircles all or a portion of a trunk but does not contact it.

**82.26 root, girdling:** A root that encircles all or a

The following flowchart is the recommended procedure for normal root management operations:



portion of a trunk and contacts the trunk or a buttress root.

**82.27 root, surface:** A lateral root that is visible above grade.

**82.28 shall:** As used in this standard, denotes a mandatory requirement.

**82.29 should:** As used in this standard, denotes an advisory recommendation.

**82.30 soil volume:** The volume of soil available to trees and other woody plants for root development.

**82.31 specifications:** A detailed, measurable plan or proposal for performing a work activity or providing a product; usually a written document.

**82.32 standard, ANSI A300:** The performance parameters established by industry consensus as a rule for the measure of extent, quality, quantity, value or weight used to write specifications.

**82.33 stem:** A woody structure bearing buds, foliage, and giving rise to other stems.

**82.34 tracing:** The removal of loose, damaged tissue from in and around the wound.

**82.35 utilities:** Facilities associated with services such as telephone, data, CATV, electricity, gas, steam, energy transmission and distribution, water and sewage, and transportation.

**82.36 wood-chip mulch:** A material placed on the soil surface composed of ground wood, bark, and leaves usually generated by sending tree parts through a wood chipping machine.

**82.37 wound:** Damage to plant tissue caused by pests, pruning, mechanical damage, or other natural forces.

## 83 Root management practices

### 83.1 Root management objectives

**83.1.1** Arborists developing objectives and specifications, and managing roots shall have sufficient training and experience.

**83.1.2** Arborists developing objectives and speci-

fications, and managing roots should visually inspect the tree(s) and the site.

**83.1.3** Soil volume, fill, air and water movement, drainage, and the distance between roots and infrastructure should be considered.

**83.1.4** Root management objectives shall be established with the owner or owner's agent.

**83.1.5** Root management objectives shall be defined based on potential tree benefits, the intended use of the site, tree stability, and the scope of the assignment.

### 83.2 General

**83.2.1** If a condition is observed requiring attention beyond the original scope of the work, the condition should be reported to an immediate supervisor, the owner, or the person responsible for authorizing the work.

**83.2.2** Root management practices should include, but are not limited to, one or more of the following:

- Inspection of the tree, including the trunk, flare, root collar, detectable roots, and soil volume;
- Selective root pruning;
- Non-selective root cutting; and,
- Directing or redirecting roots.

**83.2.3** Tools and equipment should be maintained according to manufacturer's recommendations.

**83.2.4** Equipment, tools, and work practices that damage living tissue, bark, or soil beyond the scope of work shall be avoided.

**83.2.5** Wound treatments that are damaging to tree tissues outside the scope of work shall not be used.

**83.2.6** Wound treatments shall not be used to cover wounds, except to manage dessication or pests, or for aesthetic purposes.

**83.2.7** Tracing of wounds shall remove only dead, loose, and damaged tissue.

**83.2.8** Evaluation of decay, callus and woundwood growth, and response growth in the trunk and crown shall be considered.

### **83.3 Trunk, flare, and root inspection**

**83.3.1** Objectives of inspections shall be established.

**83.3.2** The method, area, depth, and limitations of inspection shall be specified.

**83.3.3** Tools and equipment used for inspection shall be specified.

**83.3.4** Inspection should include, but is not limited to, one or more of the following:

- Conditions in the crown that may reflect root conditions;
- Stem tissue connecting the crown and the roots;
- Girdling of the buttress roots or stems by roots or other materials, and the tree's response;
- Tree association with beneficial and harmful insects;
- Tree association with pathogenic and beneficial microorganisms (e.g. mycorrhizae);
- Wounds, and the tree's response to wounds;
- Mechanical damage to detectable roots and response;
- Indications of root disease and response; and,
- Graft unions in grafted trees.

**83.3.5** Mulch, soil, and other materials should be removed as needed to allow for the inspection.

**83.3.6 Soil excavation for root collar examination**

**83.3.6.1** Small adventitious roots that interfere with excavation or examination should be moved or pruned.

**83.3.6.2** Adventitious roots should be considered for retention.

**83.3.6.3** Temporary protection of newly exposed rootzone, root tissue, and stem tissue shall be considered.

**83.3.7** Detectable flare and root diseases and disorders should be diagnosed.

**83.3.8** If significant structural defects are

observed, a risk assessment should be recommended, see ANSI A300 (Part 9) – *Tree Risk Assessment* standard.

**83.3.9** The flare and buttress roots should remain visible after inspection.

### **84 Root management practices – root pruning and cutting**

#### **84.1 Root pruning and cutting objectives**

**84.1.1** Root pruning and cutting objectives shall be established.

**84.1.2** The extent and method of root pruning or cutting shall be based on the objectives, species tolerance, environmental factors, timing, age, health, lean, and structural condition of the tree(s).

**84.1.3** When establishing objectives, potential for tree decline or destabilization shall be considered.

**84.1.4** Tools and equipment shall be specified.

#### **84.2 Root pruning and root cutting practices**

**84.2.1** The owner should be notified of the risk to tree health and stability prior to the pruning or cutting of roots.

**84.2.2** When mitigating or avoiding infrastructure damage, only roots causing or likely to cause damage should be pruned.

**84.2.3** Surface roots should be managed by removing soil or reducing soil density in accordance with ANSI A300 (Part 2) – *Soil Management* standard, to meet the objective including, but not limited to raising the grade with porous soil, sand, or mulch.

**84.2.4** Selective root pruning or non-selective root cutting shall be specified where needed to meet the objective.

**84.2.5** When root removal is unavoidable, selective pruning shall be the preferred method.

**84.2.6** Root pruning and cutting tools should be sharp.

#### **84.3 Selective root pruning**

**84.3.1** The size and/or location of roots to be pruned shall be specified.

**84.3.2** Roots should be exposed using the least injurious excavation method prior to pruning.

**84.3.3** A pruning cut that removes a root at its point of origin should not cut into the trunk or parent root.

**84.3.4** Smaller pruning cuts shall be preferred.

**84.3.5** The final cut should result in a flat surface with adjacent bark firmly attached.

#### **84.4 Selective root pruning – girdling roots**

**84.4.1** Roots that encircle or girdle the trunk or a buttress root should be considered for redirecting or pruning.

**84.4.2** Girdling roots should be exposed before pruning cuts are planned or made.

**84.4.3** Retention of encircling or girdling roots that are providing more benefit than damage shall be considered.

**84.4.4** The trunk and buttress roots shall not be damaged beyond the scope of the work.

**84.4.5** If one or more large girdling roots are present, progressive root pruning over a specified time period should be considered.

**84.4.6** Root pruning tools shall include, but are not limited to: handsaws; lopping shears; chisels; hand shears; chain saws; reciprocating saws; and, circular saws (see subclause **80.4 Safety**).

#### **84.5 Non-selective root cutting**

**84.5.1** When non-selective root cutting is necessary, roots shall be cut as far from the trunk as practical.

**84.5.2** The location and depth of excavation for root cutting shall be specified.

**84.5.3** Minimum distance from the trunk for root cutting should be adjusted according to trunk diameter, species tolerance to root loss, tree age, health, and site condition.

**84.5.4** Root cutting distances from the trunk shall be adjusted for disease management, root location, tree species and condition, and, site and soil conditions.

**84.5.5** When roots are damaged within six times the trunk diameter (DBH), mitigation shall be recommended.

**84.5.6** Roots should be cut with equipment that minimizes cracking the wood and tearing the bark.

**84.5.7** Heavy equipment should be located outside the root cut line or remain on existing pavement or on a soil-protecting surface.

**84.5.8** Temporary staging areas for excavated soil should be located at a safe distance on the side of the trench furthest from the trunk.

**84.5.9** Upon completion of non-selective root cutting, selective root pruning of damaged roots in accordance with subclause 84.3 shall be considered.

### **85 Managing the direction of root-growth**

**85.1** Objectives for managing the direction of root growth shall be established prior to beginning operations.

**85.2** The type, depth, and location of root direction materials shall be specified to achieve the objective.

**85.3** Root direction methods shall include, but are not limited to, one or more of the following:  
Designing, installing, and/or maintaining root barriers; and,  
Designing, installing, and/or maintaining root channels.

**85.4** Managing the direction of root growth shall be considered as an alternative, or in conjunction with, root pruning or cutting.

**85.5** Managing the direction of root growth shall be considered following root pruning.

**85.6** Use and installation of root management devices should follow manufacturer's recommendations.

**85.7** Root barriers should be installed as far from tree trunks as possible.

**85.8** Roots that grow over the root barrier should be pruned on the tree trunk side of the barrier.

**86 Post root – management care practices**

**86.1** Specifications for monitoring and maintaining tree health and stability should be established.

**86.2** Root damage that affects the stability of the tree should be mitigated (see *ANSI A300 (Part 9) – Tree Risk Assessment standard*).

**86.3** Post-root management care should be specified for an appropriate period of time based on the region, site conditions, and species.

**86.4** Specifications for post root – management

care should consist of, but are not limited to, one or more of the following:

- a. soil moisture management;
  - b. mulching;
  - c. integrated pest management;
  - d. pruning (see *ANSI A300 (Part 1) – Pruning standard*);
  - e. soil management (see *ANSI A300 (Part 2) – Soil Management standard*);
  - f. maintenance/removal of tree support systems (see *ANSI A300 (Part 3) – Supplemental Support Systems standard*);
- and,
- g. appropriate use of growth regulator.

**Annex A – Alternatives to root pruning and cutting** (This annex is for informational purposes only and is not considered part of the ANSI A300 Part 8 standard.)

- A-1** Alternatives to root pruning and cutting may include, but are not limited to:
- Changing project design;
  - Tunneling around or beneath roots;
  - Re-routing utility lines away from roots;
  - Tree grates;
  - Bridging over roots;
  - Discontinuous footings for retaining walls, footings, and foundations;
  - Ramping sidewalks;
  - Using flexible paving materials or shallower sections;
  - Using permeable paving materials;
  - Enlarging tree wells (cut-outs) or converting them to open retaining walls;
  - Reducing sidewalk width;
  - Relocating pavement;
  - Increasing the thickness of the pavement;
  - Reinforcing with rods or under-laying it with a geotextile fabric;
  - Use of geogrids or other 'no-dig' pavement systems;
  - Using a coarse aggregate under sidewalks;
  - Supporting pavement on piers; and,
  - Covering surface-roots with soil or mulch.

**Annex B – Managing trees to mitigate root damage or loss** (This annex is for informational purposes only and is not considered part of the ANSI A300 Part 8 standard.)

- B-1** Define objectives for management of trees with root damage or loss prior to beginning operations.
- B-2** Objectives include, but are not limited to one or more of the following:  
To improve stability;  
To minimize drought stress and pest problems; and,  
To create conditions favorable for root regeneration and growth.
- B-3** Specify follow-up care for trees and shrubs sustaining root loss.
- B-4** Monitor trees sustaining root loss for symptoms of stress or decline for a specified period.
- B-5** Irrigate prior to, during, and after root pruning.
- B-6** In general, reducing or thinning woody plants to compensate for root loss is not considered an effective practice to mitigate water stress.
- B-7** Consider supporting, reducing, or thinning woody plants when stability of a root-pruned tree has been significantly decreased.
- B-8** Consider applying a 2- to 4-inch (5-10 cm) layer of organic mulch. Do not let mulch contact the flare or trunk.

**Annex C – Managing roots in fill** (This annex is for informational purposes only and is not considered part of the ANSI A300 Part 8 standard.)

- C-1** Remove as much fill as possible without damaging roots outside the scope of work.
- C-2** If adventitious roots need to be removed, specify the diameter or quantity according to tree species and condition, site factors, and whether they are needed.
- C-3** Where fill is needed to raise the grade for a specific objective, provide for drainage, adequate air, and water movement by modifying soil [see ANSI A300 (Part 2) – Soil Management standard], or by installing ventilation systems [see ANSI A300 (Part 5) – Construction standard].
- C-4** Where needed to limit erosion and manage surface water movement, install retaining devices such as silt fences, bales, logs, branches, or berms, as required by regulations. Establish berms of a size and material to permit sufficient exchange of air with the soil. Ensure contact between retaining devices and the earth.
- C-5** Design devices that provide for adequate air and water movement.



**Annex D – Managing trunks, flares, and roots affected by fill, sample specifications** (This annex is for informational purposes only and is not considered part of the ANSI A300 Part 8 standard.)

**D-1 Sample specification for multiple root collar examinations with hand tools**

**Trees and location:** Small and Large trees with fill contacting the trunk, as indicated on site.

**Objective:** Mitigate tree damage from the effects of fill on the trunk.

**Specifications:**

1. All work shall be done in accordance with ANSI A300 tree care management standards.
2. Coarse woody debris or fresh mulch will be raked away from the root collar area.
3. Excavated material will be moved away from the trunk and placed in a temporary staging area.
4. Excavation will be performed with a hand trowel and/or manual shovel.
5. Separate and dispose of any infertile soil and debris. Retain the fertile soil, fine roots, mycorrhizae, and decomposed mulch in the temporary staging area.
6. Smaller hand tools, vacuum, or compressed water or air, will be used to complete the excavation.
7. Upon completion of the excavation, the trunk and flare will be clear to the root collar and to the point of the first root branching location, according to the scope of the work.
8. Upon completion of the excavation, a visual and non-invasive hand tool (rubber sounding mallet, magnifying lens, etc.) trunk flare and root inspection will be performed.
9. The owner or owner's agent may be notified if replanting of a tree should be considered when the flare is over 2 inches (5 cm) below grade and the tree is small and/or newly planted. The root ball size and ability to withstand the operation will be considered.
10. Individual adventitious roots and stem-girdling roots 2-inch (5 cm) diameter or under will be removed as needed to meet the objective. Larger roots will be managed according to ANSI A300 (Part 8), subclauses 84.3 and 84.4. Upon completion, contact between the trunk and remaining adventitious, girdling, and circling roots will be broken or minimized according to the scope of the work.
11. Remove soil and fine roots outside of the root collar to make a gradual slope.
12. Apply 2-4 inches (5-10 cm) of mulch over the root collar. Avoid mulch contact with the flare.
13. Incorporate fertile soil, fine roots, mycorrhizae, and decomposed mulch into the outer rootzone, without raising the final grade more than 2 inches (5 cm).

**Note:** This sample specification is for hand tool excavation/inspections only, use of mechanical equipment requires knowledge and consideration of manufacturer's recommendations when writing work specifications.

**Annex E – Objectives for root pruning and cutting** (This annex is for informational purposes only and is not considered part of the ANSI A300 Part 8 standard.)

**E-1** Root pruning and cutting objectives include, but are not limited to, one or more of the following:

- Mitigating and preventing damage to the trunk or the buttress roots from girdling or circling roots;
- Preparing trees for transplanting;
- Protecting roots from infrastructure and other uses of the area;
- Managing interference with infrastructure and other uses of the area;
- Managing interactions with other plants;
- Managing pests and diseases;
- Gaining access to the root zone to install, repair, or replace infrastructure;
- Facilitating alternate use of the rootzone;
- Mitigating damage to roots; and,
- Minimizing root damage during construction.

**Notes:**



**Notes:**



ANSI A300 (Part 8)-2013, Root Management



A300P8\_2013

Non-Member	\$20.00
Member	\$15.00