

**REQUEST FOR BIDS
FOR
MILL CREEK TRIBUTARY STREAM FUNCTION RESTORATION
PROJECT: LANDSCAPING**

September 3, 2019

Prepared for:

City of Sharonville, Ohio
10900 Reading Road
Sharonville, OH 45241

In Partnership with:

Mill Creek Alliance
1223 Jefferson Avenue
Cincinnati, OH 45215

TABLE OF CONTENTS

1.0 PROJECT DESCRIPTION.....	3
1.1 CONTACT INFORMATION	3
1.2 CONTRACTOR QUALIFICATIONS	3
1.3 PRE-BID MEETING.....	4
1.4 PROJECT SCHEDULE	4
2.0 BID SCHEDULE	5
3.0 INSTRUCTIONS TO BIDDERS, INSURANCE AND CONTRACT BOND.....	6
3.1 CITY OF SHARONVILLE BID SPECIFICATIONS	6
3.2 OHIO PUBLIC WORKS COMMISSION BID SPECIFICATIONS	9
4.0 GENERAL CONDITIONS.....	21
4.1 CONSTRUCTION SEQUENCE	21
4.2 PRE-CONSTRUCTION MEETING.....	21
4.3 MAINTENANCE OF TRAFFIC	21
4.4 EXISTING UTILITIES	21
4.5 CONSTRUCTION PROCEDURE.....	22
4.6 REQUEST FOR SUPPLEMENTARY INFORMATION	22
4.7 USE OF PREMISES	22
4.8 MOBILIZATION AND DEMOBILIZATION	22
4.9 SUBSTANTIAL COMPLETION	23
4.10 FINAL COMPLETION.....	23
5.0 TECHNICAL SPECIFICATIONS	24
5.1 ENVIRONMENTAL PROTECTION.....	24
5.2 SEEDING AND MULCHING	27
5.3 EROSION CONTROL BLANKET	28
5.4 LIVE STAKES	30
5.5 WETLAND PLUGS.....	33

1.0 PROJECT DESCRIPTION

The City of Sharonville has received grant funding to establish a low-flow stream channel through an existing retention basin of a Mill Creek tributary. The project area encompasses approximately 1.2 acres of City of Sharonville property. A total of 400 linear feet of a Mill Creek tributary is proposed for work. The project is located at the northeastern corner of intersection of Kemper Road and Mosteller Road to the immediate south of an Interstate 275 on ramp.

The City is accepting bids from qualified contractors for restoration of the riparian corridor with native vegetation. The work covered within this Request For Bids (RFB) does not include stabilization of the degraded stream with bank rock, gravel riffles, and finish grading, which is described in a separate RFB.

1.1 CONTACT INFORMATION

Owner:

Jim Lukas

Safety Service Director

10900 Reading Road, Room 183

Sharonville, OH 45241

(513) 563-1144

Owner's Representative:

Bennett Kottler

Project Manager, Mill Creek Alliance

1223 Jefferson Avenue

Cincinnati, Ohio 45205

(513) 563-8800

Design Engineer:

Scott Peyton,

Senior Principal, Stantec

11687 Lebanon Road

Cincinnati OH 45241-2012

(513) 842-8217

1.2 CONTRACTOR QUALIFICATIONS

Contractors should demonstrate their ability to perform the work included in this RFB by describing experience and capabilities related to similar project work. The Contractor shall submit evidence of at least two (2) similar projects completed in the past three (3) years. Provide a description of the scope,

date of completion, total construction cost and contact information for the owner of each project completed. The Contractor shall also provide a list detailing current projects for which they are under contract. Provide the scheduled date of completion for each current project.

Failure to meet these minimum requirements will be justification for declaring a bid non-responsive.

1.3 PRE-BID MEETING

A mandatory pre-bid meeting will be held on Thursday, October 10th at 2:00 p.m. at the Sharonville Municipal Building, located at 10900 Reading Road, Sharonville, OH 45241.

The Owner and Owner's Representative will describe the scope of work for the project, clarify content of the Contract Documents, make the project area available for visual assessment, and answer any questions from prospective bidders that pertain to the scope of work.

1.4 PROJECT SCHEDULE

Sealed proposals are due by Friday, October 25th at 11:30 a.m. at the Sharonville Municipal Building, located at 10900 Reading Road, Sharonville, OH 45241. The Contractor shall include a proposed schedule for project completion before April 15, 2020 and coordinate the transition of the project site from Stream Stabilization contractor.

2.0 BID SCHEDULE

The bidder shall fully complete the table for the bid items shown below. Failure to do so may cause rejection of the bid. This project shall be bid as lump sum, with unit costs provided for change order purposes, as necessary.

Description	Quantity	Units	Installed Unit Cost	Subtotal
Permanent Seeding Zone 1	0.80	AC		
Permanent Seeding Zone 2	0.20	AC		
Erosion Control Blanket	1,000	SY		
Live Stakes (1/2" x 4')	600	EA		
Wetland Plugs	1,200	EA		
			Total	

Total Bid Amount (in words):

Proposed Start Date:

3.0 INSTRUCTIONS TO BIDDERS, INSURANCE AND CONTRACT BOND

Contractors shall comply with the following standard Bid Specifications for the City of Sharonville and Ohio Public Works Commission.

3.1 CITY OF SHARONVILLE BID SPECIFICATIONS

1. Each bidder is required to furnish with its proposal, a Bid Guaranty and Contract Bond in accordance with Section 153.54 through 153.571 of the Ohio Revised Code. Bid security, furnished in Bond form, shall be issued by a surety company or corporation licensed in the State of Ohio in the full amount of one hundred percent (100%) of the bid amount. A 100% satisfactory performance and payment bond shall be required of the successful bidder.
2. Each bid must be submitted in a sealed envelope plainly marked on the outside with the name of the bidder, the bidder's address, and the name of the project for which the bid is submitted. Each bid must contain the full name of the party or parties submitting the same and all persons interested therein. All bids must be submitted on the original bid forms furnished by the Owner. Bids containing any conditions, omissions, unexplained erasures, alteration of forms, or irregularities of any kind may be rejected by the Owner. However, the Owner reserves the right to accept or to reject any or all proposals and to waive defects or technicalities as he may deem best for his/her interest.
3. The bidder is expected to carefully examine the site of the proposed work, the proposal, plans, specifications, general conditions, addenda, etc. before submitting a proposal. The submission of a bid shall be considered evidence that the Bidder has made such examination and is satisfied as to the conditions to be encountered in performing the work and as to the requirements of the contract.
4. In regard to addenda, notify the Owner promptly of any discrepancies in, or omissions from, the Contract Documents. The Owner will issue a clarifying addendum to each person on record as having received a set of Contract Documents.
5. The Owner requires that the Bidder shall furnish satisfactory evidence that he has the necessary resources to fulfill the conditions of the Contract Documents.
6. In order that the Owner may award the project to the "lowest and best bidder", the Bidder is advised that the Owner may conduct such investigations (written or oral, confidential or non-confidential) as it may at its sole option to undertake, which investigation will help establish the responsibility, including qualification, experience on similar project, financial condition, conduct and performance on previous contracts, proposed subcontractors, suppliers and/or other party proposed to perform or furnish work or materials in accordance with the Contract Documents, facilities and equipment, management skills, and ability to execute the contract properly.
7. The Owner may make such investigations as deemed necessary to determine the ability of the Bidder to

perform the work, and the Bidder shall furnish to the Owner all such information and data for this purpose as the Owner may request.

8. The Owner reserves the right to reject any bid if the evidence submitted by, or investigations of such Bidder fails to satisfy the Owner that such Bidder is properly qualified to carry out the obligations of the Contract and to complete the Work contemplated herein.
9. Bid security of all except the three lowest bidders will be returned within ten days after the opening of bids. Bid security of the three lowest bidders will be returned within ten days after the contract has been executed with the successful bidder and the required bonds have been finally approved by the Owner. If the required Contract and Contract Bonds have been executed within sixty days after the time specified for the Owner to evaluate bids, the bid security will be returned upon his/her request, provided he has not been given "Notice of Award" prior to the date of such request. Any bidder may withdraw his/her Proposal, providing his/her written request is received by the Owner prior to the specified time of opening the bids, or he may change or modify the Proposal in the same manner in which it was originally submitted, but no bidder may withdraw his/her Proposal after the specified time of the opening of bids.
10. Bidder may withdraw his/her or her Bid, in person only, at any time prior to the scheduled time for closing the receipt of Bids. Withdrawals after the scheduled time for closing the receipt of Bids will not be permitted for a period of sixty (60) days.
11. In addition to other general conditions above, the Owner shall consider the bid for items on the bid form, including any contingencies, in determining the lowest and best bid. The Contractor shall state in his or her proposal the number of calendar days required to reach Substantial Completion, not to exceed thirty (30) days. This information shall also be a factor in determining the successful bidder. If the number Total does not equal the written Total, the lesser of the two values shall be used. Bids may also be rejected if they are unreadable or there is evidence of collusion.
12. The Contractor shall, within ten (10) days from the date of the "Notice of Award", furnish to the Owner, four (4) copies of the required "Contract Bonds" and proof of Insurance coverage, and shall sign the "Form of Contract". The Contracts shall be considered as awarded only after the Owner is satisfied as to the Surety or Sureties guaranteeing the Contractor's performance, the proof of insurance coverage is satisfactory, and the Contract has been signed by both parties. Insurance coverage shall include Public Liability, Property Damage and Vehicle Liability Insurance.
13. If the party to whom the "Notice of Award" has been mailed, has not executed the "Form of Contract, the "Contract Bonds" and provided Proof of Insurance within ten (10) days as specified, he shall be considered in default thereof, and the Owner, in addition to any other remedies at law or equity available to Owner, may retain the deposit accompanying his or her proposal as liquidated damages for

any expense or delay which may be incurred in making another letting for the performance of said work and to indemnify said Owner for any loss which he may sustain. The project may then be re-bid or let to another bidder, as the Owner may determine.

14. Failure to complete the project within the agreed timeframe shall subject the Contractor to liquidated damages. Said damages shall be assessed against the prime contractor at a rate of \$100/day unless the Contractor has given previous written notice of unforeseen delays such as acts of God, or of the public enemy, acts of the Owner, fires, floods, epidemic, quarantine, restrictions, strike, freight embargos, and abnormal and unforeseeable weather.

3.2 OHIO PUBLIC WORKS COMMISSION BID SPECIFICATIONS

1. STEEL PRODUCTS MADE IN THE UNITED STATES

Domestic steel use requirements as specified in Ohio Revised Code §153.011 apply to this project. Copies of §153.011 can be obtained from any of the offices of the department of administrative services or through <http://codes.ohio.gov/orc/153.011>.

2. PREVAILING WAGE ON STATE PROJECTS WITH NO FEDERAL-AID

This contract is subject to Ohio Prevailing Wage Laws, Chapter 4115 of the Ohio Revised Code and the Contractor and all subcontractors shall comply with all provisions contained therein or as otherwise provided by this note. The Contractor guarantees that the prevailing wage scale to be paid to all laborers and mechanics employed on this contract shall be in accordance with the schedule of the prevailing hourly wage and fringe benefits as determined by the Ohio Department of Commerce for the county in which the work is being performed. The failure to pay prevailing wages to all laborers and mechanics employed on this project shall be considered a breach of contract. Such a failure may result in the revocation of the contractor's and/or subcontractor's certificate of qualification and debarment. A schedule of the most current prevailing wage rates may be accessed by logging in/registering with the Ohio Department of Commerce, Labor and Worker Safety Division, Wage and Hour Bureau at the following web address:

<http://198.234.41.198/w3/webwh.nsf/wrlogin/?openform>

The Contractor and all subcontractors shall compensate the employees on this contract at a pay rate not less than the hourly wage and fringe rate listed on the website noted above, for the applicable job classification or as may be modified by the Ohio Department of Commerce, Division of Labor and Worker Safety Wage and Hour Bureau, when new prevailing rates are established.

Overtime shall be paid at one and one-half times the basic hourly rate for any hours worked beyond forty hours during a pay week. The Contractor and all subcontractors shall pay all compensation by company check to the worker and fringe benefit program.

The wage and fringe rates determined for this project or as may be later modified, shall be posted by the Contractor in a prominent and accessible place on the project, field office, or equipment yard where they can be easily read by the workers or otherwise made available to the workers. On the first pay date of contract work the Contractor and all subcontractors shall furnish each employee covered by prevailing wage a completed form (WHPW-1512) in accordance with section 4115.05 of the Ohio Revised Code, showing the classification, hourly pay rate, and fringes, and identifying the public authority's Prevailing Wage Coordinator, if such employees are not covered by a collective bargaining agreement or understanding between employers and bona fide organizations of labor. These forms shall be signed by the Contractor or subcontractor and the employee and kept in the Contractor's or subcontractor's payroll files.

The Contractor and all subcontractors shall submit to the Prevailing Wage Coordinator, certified payrolls on form WHPW-1512 or equivalent, in accordance with sections 4115.07 and 4115.071 (C) of the Ohio Revised Code, three weeks after the start of work and every subsequent week until the completion of the contract. Additionally, a copy of the “Apprentice Certification” obtained from the Ohio State Apprenticeship Council, must accompany all certified payrolls submitted, for all apprentices working on this project. Upon completion of the contract and before the final payment, the Contractor shall submit to the Prevailing Wage Coordinator a final wage affidavit in accordance with section 4115.07 of the Ohio Revised Code stating that wages have been paid in conformance with the minimum rates set forth in the contract. Please be aware that it is ultimately the responsibility of the Contractor to ensure that all laws relating to prevailing wages in Chapter 4115 of the Ohio Revised Code are strictly adhered to by all subcontractors.

The Contractor and all subcontractors shall make all of its payroll records available for inspection, copying or transcription by any authorized representative of the contracting agency. Additionally, the Contractor and all subcontractors shall permit such representatives to interview any employees during working hours while the employee is on the job.

3. UNRESOLVED FINDING FOR RECOVERY

The Contractor affirmatively represents to the local contracting authority that it is not subject to a finding for recovery under Ohio Revised Code §9.24, or that it has taken the appropriate remedial steps required under §9.24 or otherwise qualifies under that section. The Contractor agrees that if this representation is deemed to be false, the contract shall be void ab initio as between the parties to this contract, and any funds paid by the state hereunder shall be immediately repaid to the local contracting authority, or an action for recovery may be immediately commenced by the local government and/or for recovery of said funds.

4. OHIO WORKERS’ COMPENSATION COVERAGE

The Contractor must secure and maintain valid Ohio workers’ compensation coverage until the project has been finally accepted by the local contracting authority. A certificate of coverage evidencing valid workers’ compensation coverage must be submitted to the local contracting authority before the contract is executed.

The Contractor must immediately notify the local contracting authority, in writing, if it or any subcontractor fails or refuses to renew their workers’ compensation coverage. Furthermore, the Contractor must notify the local contracting authority, in writing, if it or any of its subcontractor’s workers’ compensation policies are canceled, terminated or lapse.

The failure to maintain valid workers’ compensation coverage shall be considered a breach of contract which may result in the Contractor or subcontractor being removed from the project, withholding of pay

estimates and/or termination of the contract.

5. DRUG-FREE WORKPLACE PROGRAM

In accordance with Ohio Revised Code §153.03 and during the life of this project, the Contractor and all its Subcontractors that provide labor on the Project site must be enrolled in and remain in good standing in the Ohio Bureau of Worker’s Compensation (“OBWC”) Drug-Free Workplace Program (“DFWP”) or a comparable program approved by the OBWC.

6. OHIO PREFERENCE

In accordance with Ohio Revised Code §164.05 (A)(6), to the extent practicable, the Contractor and subcontractor shall use Ohio products, materials, services and labor in connection with this project.

7. BID GUARANTY

In accordance with Ohio Revised Code §153.54, the Contractor shall file with the bid a bid guaranty in the form of either: 1) a bond for the full amount of the bid, or 2) a certified check, cashier’s check, or letter of credit equal to 10% of the bid.

8. OHIO ETHICS LAW

Contractor agrees that it is currently in compliance and will continue to adhere to the requirements of Ohio Ethics law as provided by Section 102.03 and 102.04 of the Ohio Revised Code.

9. STATE OF OHIO EQUAL EMPLOYMENT OPPORTUNITY REQUIREMENTS

NOTICE TO CONTRACTORS

The provisions of the Ohio Administrative Code (OAC) 123:2-3-02 through 124:2-9 regarding Equal Employment Opportunity on State Construction Contracts and State-assisted Construction Contracts, and OAC 123:2-3-02 through 123:2-9 regarding Equal Employment Opportunity and Female Utilization Goals are applicable to this project, and each contractor will be required to comply in all aspects of these provisions.

CERTIFICATE OF COMPLIANCE FOR EEO PURPOSES

All prime contractors must secure a valid Certificate of Compliance from the Department of Administrative Services, Equal Opportunity Division, prior to execution of a construction contract.

See: <http://www.das.ohio.gov/Divisions/EqualOpportunity/CertificateofCompliance/tabid/129/Default.aspx> for instructions for electronic filing.

>>> Does this bidder have a valid Certificate of Compliance? ___ Yes ___ No

>>> If "No" to the above, will this bidder be able to obtain a valid Certificate of Compliance prior to the

execution of a contract? ____Yes ____No

Bidder must provide a "Yes" answer to one or the other of the above questions.

BIDDER'S AFFIRMATIVE ACTION REQUIREMENTS

Each prime contract bidder must submit an affirmative action program regarding equal employment opportunity to and receive approval from the State Equal Employment Opportunity (EEO) Coordinator prior to the bid opening, **OR** the prime contract bidder must evidence within its bid the adoption of the minority and female utilization work hour utilization goals and the specific affirmative action steps set forth in 123:2-3 through 123:2-9 of the Ohio Administrative Code.

>>> Has the prime contract bidder prepared and submitted an Affirmative Action Program to the State Equal Employment Opportunity Coordinator and that program has been approved by the State Equal Employment Opportunity Coordinator prior to the bid opening? ____Yes ____No

>>> If “no”, with this bid response, the prime contract bidder hereby adopts the minority and female work hour utilization goals and the specific affirmative action steps set forth in 123:2-3 through 123:2-9 of the Ohio Administrative Code.

BIDDER'S EEO COVENANTS

Throughout its performance of any contract awarded to it on this State-assisted project, the prime contract bidder agrees to the following covenants:

(1) The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, national origin, ancestry or sex. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, national origin, ancestry or sex. Such action shall include, but is not limited to, the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.

The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

(2) The Contractor will in all solicitations or advertisements for employees placed by or on behalf of the prime contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, national origin, ancestry or sex.

(3) The Contractor will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice to be provided by the

State Administering Agency advising the said labor union or workers' representatives of the Contractor's commitments under this covenant and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

- (4) The Contractor will comply with all provisions of the Ohio Department of Administrative Services, Equal Opportunity Division and with the implementing rules, regulations and applicable orders of the State Equal Employment Opportunity Coordinator.
- (5) The Contractor agrees to fully cooperate with the State Administering Agency, the State Equal Employment Opportunity Coordinator and with any other official or agency, or the State or Federal government which seeks to eliminate unlawful employment discrimination, and with all other State and Federal efforts to assure equal employment practices under its contract and the Contractor shall comply promptly with all requests and directions from the State Administering Agency, the State Equal Employment Opportunity Coordinator and any of the State of Ohio officials and agencies in this regard, both before and during construction.
- (6) Full cooperation as expressed in clause (5), above, shall include, but not be limited to, being a witness and permitting employees to be witnesses and complainants in any proceeding involving questions of unlawful employment practices, furnishing all information and monthly utilization work hour reports required by the OAC 123: 2-9-01 and by the rules, regulations and orders of the State Equal Employment Opportunity Coordinator pursuant thereto, and permitting access to its books, records, and accounts by the State Administering Agency and the State Equal Employment Opportunity Coordinator for purposes of investigation to ascertain compliance with such rules, regulations and orders. Specifically, contractors will submit workforce utilization reports to the State Equal Opportunity Coordinator by the 10th of each month. The monthly reports must be electronically submitted through the following website:
<http://das.ohio.gov/EOD/CCInputForm29.htm>
- (7) In the event of the Contractor's noncompliance with the nondiscrimination clauses of its contract or with any of the said rules, regulations, or orders, its contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further State Contracts or State-assisted Construction Contracts in accordance with procedures authorized in OAC 123:2-3 through 2-9 and such other sanctions may be instituted and remedies invoked, as provided in OAC 123:2-3 through 2-9 or by regulation, or order of the State Equal Employment Opportunity Coordinator, or as otherwise provided by law.

In the event that its contract is terminated for a material breach of OAC 123:2-3 through 2- 9 the Contractor shall become liable for any and all damages which shall accrue to the State Administering Agency and Applicant and the State of Ohio as a result of said breach.

(8) The Contractor will require the inclusion of language reflecting these same eight covenants within every subcontract or purchase order it executes in the performance of its contract unless exempted by rules, regulations or orders of the State Equal Employment Opportunity Coordinator issued pursuant to O.A.C. 123:2-3-02 so that these provisions will be binding upon each subcontractor or vendor. The Contractor will take such actions as the Administering Agency may direct as a means of enforcing such provisions, including sanctions for noncompliance; provided, however, that in any litigation with a subcontractor, vendor or other party as a result of such direction by the State Administering Agency, the Contractor may be requested to protect the interests of the State.

>>> The prime contract bidder hereby adopts the foregoing covenants? ___Yes ___No

BIDDER'S CERTIFICATION

The undersigned, being a duly authorized officer of the prime contract bidder, does hereby certify to and agree with the foregoing statements and covenants regarding its subscription to the State's Equal Employment Opportunity Requirements for State-assisted Construction Contracts.

_____/_____/_____
Signature of Authorized Officer Date

Title

>>> PLEASE NOTE: Only a bidder possessing a valid certificate will be awarded a contract pursuant to Chapter 153 of the Revised Code by an owner referred to in section 153.01 of the Revised Code. Application shall be made at least ten working days prior to the date that the bidder expects to receive the certificate. The bidder's failure to elect one of the two Bidder's Affirmative Action Requirements, adopt the Bidder's EEO Covenants, and complete the foregoing certification may cause the bidder's proposal to be rejected as being non-responsive to the State's Equal Employment Opportunity Requirements and in non-compliance with the State Equal Employment Opportunity Bid Conditions. In addition, the bidder must, prior to the execution of a contract, submit to the local subdivision a valid Certificate of Compliance.

"APPENDIX A" OF THE STATE EEO BID CONDITIONS

MINORITY MANPOWER UTILIZATION GOALS AND TIMETABLES

The following minority goals listed are expressed in terms of percentages of work hours for each trade to be used by the contractor in a designated area. Designated areas are defined as Ohio's Standard Metropolitan Statistical Areas (SMSA). They are: Akron, Cincinnati, Cleveland, Columbus, Dayton, Toledo and Youngstown-Warren. In cases where the project is not located in a designated area, the contractor may adopt minority utilization goals of the near/nearest designated area.

AKRON		CINCINNATI		CLEVELAND	
All Trades	10%		<u>Trade</u>		<u>Trade</u>
		Asbestos Workers	9%	Asbestos Workers	17%
		Boilermakers	9 %	Boilermakers	10%
		Carpenters	10%	Carpenters	16%
COLUMBUS		Elevator Constructors	11%	Electricians	20%
All Trades	10%	Floor Layers	10%	Elevator Constructors	20%
		Glaziers	10%	Floor Layers	11%
		Lathers	10%	Glaziers	17%
DAYTON		Marble, Tile, Terrazzo	8%	Ironworkers	13%
All Trades	11%	Millwright	10%	Operating Engineers	17%
		Operating Engineers	11%	Painters	17%
		Painters	11%	Pipefitters	17%
TOLEDO		Pipefitters	11%	Plasterers	20%
All Trades	9%	Plasterers	10%	Plumbers	17%
		Plumbers	11%	Roofers	17%
		Sheet Metal Workers	11%	Other Trades	17%
YOUNGSTOWN		Other Trades	11%		
All Trades	9%				

"APPENDIX B" OF THE STATE EEO BID CONDITIONS

SPECIFIC AFFIRMATIVE ACTION STEPS

The following Affirmative Action steps are directed at increasing minority utilization:

(1) The Contractor should maintain a file of the names and addresses of each minority and female referred to it by any individual or organization and what action was taken with respect to each such referred individual, and if the individual was not employed by the contractor, and the reasons therefore. If such individual was sent to the union hiring hall for referral and not referred back by the union or if referred back by the union or if referred, not employed by the contractor, the file should document this and the reason therefore.

To Demonstrate Compliance: Maintain a file of the names, addresses, telephone numbers, and craft of each minority and female applicant showing (a) the date of contact and whether the person was hired; if not, the reason, (b) if the person was sent to a union for referral, and the results (c) follow-up contacts when the contractor was hiring.

(2) The Contractor should promptly notify the State Contracting Agency when the Union or Unions with which the Contractor has collective bargaining agreements does not refer to the Contractor a minority or female worker referred (to the union) by the Contractor, or when the Contractor has information that the union referral process has impeded efforts to meet its goals.

To Demonstrate Compliance: Have a copy of letters sent, or do not claim the union is impeding the Contractors' efforts to comply.

(3) The Contractor should disseminate its Equal Employment Opportunity policy within its organization by including it in any company newsletters and annual reports; by advertising at reasonable intervals in union publications; by posting of the policy; by specific review of the policy with minority and female employees; and by conducting staff meetings to explain and discuss the policy.

To Demonstrate Compliance: Have a written EEO policy which includes the name and how to contact the contractor's EEO Officer and (a) include the policy in any company policy manuals, (b) post a copy of the Policy on all company bulletin boards (in the office and on all job sites), (c) records, such as reports or diaries, etc., that each minority and female employee is aware of the Policy and that it has been discussed with them, (d) that the policy has been discussed regularly at staff meetings and (3) copies of newsletters and annual reports which include the Policy.

(4) The Contractor should continually monitor all personnel activities to ensure that its EEO policy is being carried out, including the evaluation of minority and female employees for promotional opportunities on a quarterly basis and the encouragement of such employees to seek those opportunities.

To Demonstrate Compliance: Have records that the company EEO Officer reviews all: (a) monthly workforce reports, (b) hiring and terminations, (c) training provided on-the-job, (d) minority and female employees quarterly for promotion and encourages them to prepare for and seek promotion. The records should be the EEO Officer's job description, reports, memos, personnel files, etc., documenting the activities for possible discriminatory patterns.

(5) The Contractor should disseminate its EEO policy externally by informing and discussing it with all recruiting sources; by advertising it in news media, specifically including minority and female news media; and by notifying and discussing it with all subcontractors.

To Demonstrate Compliance: Have copies of (a) letters sent, at least six months or at the start of each new major contract, to all recruiting sources (including labor unions) requiring compliance with the Policy, (b) advertising, which has the EEO "tagline" on the bottom, and (c) purchase order and subcontract agreement forms will include or make reference to the State EEO Covenant, Appendix A or B of the Ohio Administrative Code 123:2-3-02.

(6) The Contractor should make specific and reasonably recurrent oral and written recruitment efforts directed at minority and women's organizations, and training organizations with the Contractor's recruitment area.

To Demonstrate Compliance: Have a record either in a follow-up file for each organization or on the reverse of the notification letter sent under Item 1, above, of the dates, individuals contacted and the results of the contract from telephone calls or personal meetings with the individuals or groups notified under Item 1.

(7) The Contractor, where reasonable, should develop on-the-job training opportunities and participate and assist in all Department of Labor funded and/or approved training programs (including Apprenticeship) Programs relevant to the Contractor's employee needs consistent with its obligations in the Bid Conditions.

To Demonstrate Compliance: Have records of contributions in cash, equipment supplied and/or Contractor personnel provided as instructors for Bureau of Apprenticeship and Training approved or Department of Labor funded training programs and records of the hiring and training of minorities and females referred to Company by such programs.

(8) The Contractor should solicit bids for subcontracts (and joint ventures) from available minority and female subcontractors engaged in the trades covered by the Bid Conditions, including circulation of minority and female contractors associations.

To Demonstrate Compliance: Have copies of letters or other direct solicitation of bids for subcontracts/joint ventures from minority/female contractors with a record of the specific response and any follow-up the contractor has done to obtain a price quotation or to assist a minority/female contractor in preparing or reducing a price quotation; have a list of all minority/female subcontracts awarded or joint ventures participated in with dollar amounts, etc.

EXPLANATION OF AN ACCEPTABLE AFFIRMATIVE ACTION PROGRAM:

An Affirmative Action Program is a set of specific and result-oriented procedures to which a Contractor shall apply every good faith effort. The objective of those procedures and efforts is to assure equal employment opportunity. An acceptable Affirmative Action Program will include an analysis of all trades employed by the Contractor within the last year with an explanation of whether Minorities are currently being under-utilized in any one or more trades. A necessary prerequisite to the development of a satisfactory Affirmative Action Program is the identification and analysis of problem areas inherent in Minority employment and an evaluation of opportunities for utilization of Minority group personnel.

Part I - Basic Contents of an Affirmative Action Program:

1. Development or reaffirmation of the contractor's EEO policy in all personnel actions.
2. Formal internal and external dissemination of contractor's EEO policy.
3. Establishment of responsibilities for implementation of the contractor's affirmative action program.
4. Identification of problem areas (deficiencies) by organizational units and job classification.
5. Establishment of goals and objectives by organizational units and job classification, including timetables for completion.
6. Development and execution of action oriented programs designed to eliminate problems and further designed to attain established goals and objectives.
7. Design and implementation of internal audit and reporting systems to measure effectiveness of the total programs.
8. Personnel policies and practices compliance with Federal sex discrimination guidelines (41 CFR Part 60-20).
9. Active support of local and national community action programs and community service programs, designed to improve the employment opportunities of minorities.
10. Consideration of ethnic minorities and women not currently in the work force having requisite skills who can be

recruited through affirmative action measures.

11. Summary data on applicant flow, hires, terminations and promotions, and training for the last twelve months or the last one hundred applicants, hires, etc., whichever is less.

Part II - Analysis of Individual Trades

1. The minority population of the labor area surrounding (contractor's) projects.
2. The size of the minority unemployment force in the labor area surrounding (the contractor's) projects.
3. The percentage of minority work force as compared with the total work force in the immediate labor area.
4. The general availability of minorities having requisite skills in the immediate labor area.
5. The availability of minorities having requisite skills in the area in which the contractor can reasonably recruit.
6. The availability of promotable minority employees within the contractor's organization.
7. The anticipated expansion, contraction, and turnover of an in the work force.
8. The existence of training institutions capable of training minorities in the requisite skills.
9. The degree of training which the contractor is reasonably able to undertake as a means of making all job classes available to minorities.

Goals, timetables and affirmative action commitments must be designed to correct any identifiable deficiencies. Where deficiencies exist and where numbers or percentages are relevant in developing corrective action, the contractor shall establish and set forth specific goals and timetables. Such goals and timetables, with supporting data and the analysis thereof shall be a part of the contractor's written affirmative action program. Where the contractor has not established a goal, its written affirmative action program must specifically analyze each of the factors listed above, and must detail its reason for a lack of a goal. The goals and timetables should be attainable in terms of the contractor's analysis of its deficiencies and its entire action. Thus, in establishing its goals and timetables, the contractor should consider the results which could be reasonably expected from its good faith efforts to make its overall affirmative action program work. If the contractor does not meet its goals and timetables, the contractor's good faith efforts shall be judged as to whether the contractor is following its program and attempting to make the program work toward the attainment of its goals.

Support data for the above analysis and program shall be compiled and maintained as part of the contractor's affirmative action program. This data should include applicant flow data and applicant rejection ratios indicating minority status.

Compliance Status: No State Contractor's compliance status shall be judged alone by whether or not he reaches his goals and meets his timetables. Rather each Contractor's compliance posture shall be reviewed and determined by reviewing the contents of his program, the extent of his adherence to his program and his good faith efforts to make his program work toward the realization of the program's goals within the timetables set for completion.

“APPENDIX C” OF THE STATE EEO BID CONDITIONS

FEMALE UTILIZATION GOALS

OAC 123:2-3-05 Required utilization analysis and goals

(A) Each state-involved contractor shall include in his/her affirmative action program the information and analysis required pursuant to part IV 401-C of appendix A of rule 123:2-1-01 of the Administrative Code, in addition to female utilization requirements pursuant to the governor’s “Executive Order 84-9” and this rule.

(B) As required by the governor’s “Executive Order 84-9”, the utilization of women shall be, at a minimum, that currently in use by the federal government as of February 15, 1984. This requirement stated at C.F.R. part 60-4 is 6.9 percent utilization of women. This requirement shall remain at 6.9 percent unless further amended by the governor in a subsequent order. This requirement shall be met by a determination of work hours utilized in the same manner as minority utilization hours are calculated.

4.0 GENERAL CONDITIONS

4.1 CONSTRUCTION SEQUENCE

Ten (10) days before construction is started, the Contractor shall submit a Schedule of Work to the Owner's Representative. This Schedule shall outline the sequence proposed to conduct operations, and shall be approved by the Owner's Representative before work is started.

4.2 PRE-CONSTRUCTION MEETING

Following award of the Contract, and before starting any work, the Contractor site superintendent and/or foreman shall meet with the Owner's Representative for a pre-construction meeting. The Contractor shall be notified of the date and the time of the meeting. The Contractor shall bring their Workmen's Compensation Certificate and Proof of Liability Insurance to the pre-construction meeting.

4.3 MAINTENANCE OF TRAFFIC

It is the intention to perform the required work with the least inconvenience to, and maximum safety of, the Contractor and the traveling public. The Contractor shall not begin work in any area that may cause traffic to be disrupted, until standard barricades and warning signs are in acceptable position.

The Contractor shall coordinate maintenance of traffic and construction with the Owner and shall obtain any necessary permits should any be required.

The Contractor shall hold harmless the Owner and all its representation from all suits, actions, or claims of any character brought on account of any injuries or damages sustained by any person, or persons, or property in consequence of this construction project due to construction operations.

4.4 EXISTING UTILITIES

Utilities, water, gas, and sewer lines are known to exist within the project boundaries, but have not been located. The Owner assumes no responsibility for the accuracy of utilities that are shown on existing maps, and does not free the Contractor from necessary precautions for the protection of utilities encountered on the project or the restoration of any utility damaged during the work.

The Contractor shall notify the Ohio Utilities Protection Service (OUPS), at least 48 hours before performing any clearing, grubbing, or grading operations to locate all public and/or private service utilities or other structures that may be affected by the work.

The costs for supporting and/or protecting existing utilities shall be included in the payment for the various contract items of work. All work required for the maintenance or service of existing utilities shall be done by, and at the expense of, the Contractor. All maintenance, repair and/or replacement of existing utilities shall be in accordance with the Rules and Regulations of the various utility companies

having jurisdiction.

4.5 CONSTRUCTION PROCEDURE

It shall be the Contractor's responsibility during construction of this project to work their equipment around poles, trees, or other obstructions that permit the passage of a bucket and boom, but prevent passage of other portions of the equipment to excavate from both sides of the poles, trees, or other obstruction, and, if necessary, to remove by hand labor, tunneling or by other means, all at their own expense.

It is the intent of these Specifications to provide a procedure for keeping the restoration of seeded areas current with the installation of contract items of work. This will be considered a part of the installation, and failure to keep restoration of these items completed at the time of installation shall be cause to delay payment, until such restoration is completed to the satisfaction of the Owner.

4.6 REQUEST FOR SUPPLEMENTARY INFORMATION

It shall be the responsibility of the Contractor to make timely requests of the Owner for any additional information not already in his/her possession, and which he/she will require in the planning and execution of the work. Such requests may be submitted on an as-needed basis, but each shall be filed in ample time to permit appropriate action to be taken by all parties involved, so as to avoid delay. Each request shall be made in writing, and list items and day by which each will be required by the Contractor. The Contractor shall, if required, promptly furnish any assistance and information the Owner or Owner's Representative may require in responding to these requests of the Contractor. The Contractor shall be fully responsible for any delay in his/her work or to others arising from his/her failure to comply with the provision of this section.

4.7 USE OF PREMISES

The Contractor shall not trespass upon, or in any way disturb, property adjacent to the project site, or outside of the project boundaries, without first obtaining written permission from the Owner to do so. A copy of such written permission shall be furnished to the Owner's Representative.

If the Contractor finds it necessary to obtain additional working area, it shall be his/her responsibility for its acquisition. The Contractor shall, at his/her own expense, restore such property to the full satisfaction of the Owner, and shall obtain from the Owner a written release stating that restoration has been satisfactorily made. A copy of the written release shall be furnished to the Owner's Representative.

The Contractor shall not waste any excess earth, soil, stone, or other material at the project site without first obtaining written permission of the Owner. A copy of the Owner's written permission shall be furnished to the Owner's Representative.

4.8 MOBILIZATION AND DEMOBILIZATION

Mobilization and Demobilization shall consist of all work necessary for the movement of personnel and

equipment to and from the project site and for the establishment and removal of all the Contractor's facilities necessary to the performance of work.

4.9 SUBSTANTIAL COMPLETION

Substantial Completion occurs when all stream bank stabilization measures have been constructed and are ready for their intended use.

The Contractor shall, in writing to the Owner, certify that Substantial Completion has been met, and request that the Owner issue a letter or Certificate of Substantial Completion. Within fourteen (14) calendar days after receipt of such notice from the Contractor, the Owner, Owner's Representative, and the Contractor shall make an inspection of the work to determine the status of the work. If the Owner does not consider the work Substantially Complete, the Contractor will be notified in writing giving reasons therefore. If the Owner considers the Work Substantially Complete, a letter or Certificate of Substantial Completion will be prepared by the Owner which shall fix the date of Substantial Completion. There shall be attached to the letter or Certificate of Substantial Completion, a final list of items to be completed or corrected before Final Completion and final payment.

If the inspection by the Owner, Owner's Representative, and the Contractor confirms that the work is Substantially Complete, the Owner or the Owner's Representative shall:

- A. Prepare, and submit to the Contractor, a list of items (punch list) to be completed or corrected, as determined by the inspection, along with the designated timeframe for completion.
- B. Prepare and issue a letter or Certificate of Substantial Completion, containing:
 - a. The date of Substantial Completion.
 - b. A list of items (punch list) to be completed or corrected by the Contractor.
 - c. The timeframe within which the Contractor shall complete or correct the work of the above listed items.
 - d. The time and date the Owner will assume possession of the work or designated portion thereof.
 - e. The signature of the:
 - i. Owner
 - ii. Contractor

Substantial Completion shall occur within thirty (30) consecutive calendar days of the NTP.

4.10 FINAL COMPLETION

Final Completion occurs at a point in time after Substantial Completion has been attained. At Final Completion any contractual obligation outstanding at Substantial Completion has been satisfied, all punch list items have been satisfactorily completed to the Owner's requirements, and all restoration, final cleaning, and site demobilization has occurred.

5.0 TECHNICAL SPECIFICATIONS

5.1 ENVIRONMENTAL PROTECTION

5.1.1. GENERAL

Environmental protection requires consideration of air, water and land, and the monitoring and abatement of any impacts associated with work included under this contract.

The Contractor shall furnish all labor, equipment, and materials required for environmental protection during, and as the result of, any construction operations included under this contract.

In order to prevent environmental pollution and to provide for environmental protection arising from construction activities related to the performance of this contract, the Contractor shall comply with all applicable federal, state and local laws and regulations concerning environmental protection, as well as specific requirements stated in this section and elsewhere in the Technical Specifications.

The Contractor shall follow and comply with all applicable federal, state and local laws, regulations, permits, and standards concerning the control and abatement of water pollution. Prior to any work activity, the Contractor must obtain any necessary licenses and permits, unless otherwise directed by the Owner. Where the location of construction activities is such that oil from an accidental spillage could reasonably be expected to enter into a waterway or adjoining shoreline, and the aggregate storage of oil at the site is over 1,320 gallons, or a single container has a capacity in excess of 660 gallons, the Contractor will be required to prepare a Spill Prevention Control and Countermeasure Plan (SPCC), in accordance with 40 CFR, Part 112, as required by Public Law 92- 500, as amended by Public Laws 95-217 and 95-576.

Prior to commencement of the work, the Contractor shall meet with the Owner's Representative to develop mutual understandings relative to compliance with the provisions of this section and administration of the environmental protection program.

5.1.2 EXECUTION

Project boundaries include areas for storage of construction material and shall be prepared in a manner which will enable satisfactory restoration and will not affect the environment during, or after, the construction period. The Contractor shall not enter beyond the project boundaries except with written approval of Owner.

The location of areas for storage of the Contractor's equipment and materials, required to complete the work, shall be as shown on the Construction Drawings. Any additional areas necessary shall be approved by the Owner's Representative. The preservation of the existing landscape shall be an imperative consideration in the selection of the temporary storage sites.

The Contractor shall completely remove all signs of construction facilities, such as work areas, temporary structures, stockpiles of waste materials, erosion and sediment controls, or any other vestiges of construction. Excess soil shall be placed per the Construction Drawings and the Owner's Representative and seeded. Any disturbed area shall be graded and filled as required, and seeded in accordance with the instructions included in these Technical Specifications.

The Contractor shall not pollute streams, lakes or reservoirs with fuels, oils, bitumens, or other harmful materials. It is the responsibility of the Contractor to investigate and comply with all applicable federal, state, and local laws concerning pollution of rivers, streams and impounded water. All work under this contract shall be performed in such a manner that objectionable conditions will not be created in waterbodies adjacent to the project area.

Temporary erosion and sediment control measures, such as perimeter controls, berm, dikes, or sedimentation basins, if required to meet the above standards, shall be provided and maintained until permanent drainage controls and /or permanent vegetation is established. The area of bare soil exposed at any time by construction operations should be held to a minimum.

The Contractor shall dispose of all discarded debris, from any source whatsoever, in a manner approved by the Owner's Representative. Services shall be performed in a timely manner to prevent interference with project work. Services shall be accomplished to the satisfaction of Owner's Representative.

The Contractor shall frequently remove materials no longer required on the project site, such as excess materials, temporary structures, and equipment so that the site shall, at all times, present a neat, orderly, and workmanlike appearance.

Before final payment, the Contractor shall remove all surplus material, temporary structures, false work, trash and debris, and put the site in a neat, orderly condition; and restore all areas which have been used for or disturbed by his/her operations, to their original condition or to a condition satisfactory to and approved by the Owner's Representative.

5.1.3. GENERAL PROHIBITED CONSTRUCTION PROCEDURES

The Contractor is advised that the disposal of excess material in wetlands, stream corridors, and floodplain is strictly prohibited. Any violation of this restriction by the Contractor, or any person employed by him/her, will be brought to the immediate attention of the responsible regulatory agencies, with a request that appropriate action be taken against the offending parties. Furthermore, the Contractor will be required to remove any discarded materials at their own expense and restore the area impacted to the satisfaction of the Owner's Representative.

The Contractor shall comply with the following requirements regarding prohibited construction procedures as follows:

- A. Indiscriminate, arbitrary or capricious operations of equipment in any stream corridors, any wetlands or surface waters.
- B. Damaging vegetation adjacent to, or outside of, the project boundaries, access roads or construction right-of-way.
- C. Disposal of trees, brush and other debris in any location other than specified staging and stockpile areas.
- D. Disposal of excess or unsuitable excavation materials in streams, wetlands or floodplain.
- E. Open burning of project debris.
- F. Location of storage stockpile areas in environmentally sensitive areas.

5.2 SEEDING AND MULCHING

All portions of ODOT Specification Number 659 – Seeding and Mulching apply to this section, with the following provisions:

5.2.1. GENERAL

1. Permanent seeding and mulching shall only be performed between March 15 and October 15. Temporary seeding and mulching shall be performed as specified under ODOT Specification 832 – Erosion Control, per plan.
2. The Contractor shall submit the seed vendor's certificate for each seed mix and the shipping list to the Engineer prior to planting. Streambank and floodplain areas shall not be planted until contributing drainage areas have been stabilized and approved by the Engineer.
3. Fertilizer shall not be applied.
4. Topsoil shall be applied on access roads and staging areas and where indicated on the Construction Plans. Otherwise, topsoil shall not be applied.
5. Seed mixes and rates specified in the Construction Plans shall be used.
6. Do not place seed and mulch on frozen ground.
7. Mulching shall be performed using straw mat or straw mulch, as specified in the plans. If hydroseeding is performed, all hydroseeded areas shall also be covered with straw mat and erosion blanket, or straw mulch as specified in the plans. Mulch shall be applied at a rate of 2 tons per acre.

5.2.2. MEASUREMENT AND PAYMENT

1. Measurement for ITEM 5.2 – SEEDING AND MULCHING shall be per acre, satisfactorily installed.
2. Payment for ITEM 5.2 – SEEDING AND MULCHING shall be Lump Sum in amount identified in the Bid Schedule and shall be considered full compensation for all material, labor, equipment, and incidentals necessary to complete the Work. Temporary seeding performed during embankment reconstruction is not included under this pay item.

5.3 EROSION CONTROL BLANKET

All portions of ODOT Specification Number 670 – Erosion Protection apply to this section, with the following provisions:

5.3.1. GENERAL

Description of Work. This item consists of placement and staking of erosion control blanket following grading of the stream channel and banks.

5.3.2. MATERIALS

1. Wooden Stakes. Fasteners shall be a minimum of 1.5”x1.5”x36” wood stakes or approved equivalent.

2. Erosion Control Blanket. Erosion control blanket for this item shall be 100% natural woven coir (coconut fiber) erosion control fabrics with a weight of 700 g/m² (700 coir fiber blanket) with the following minimum properties:

1	Material	n/a	100% Spun Coir
2	Color	n/a	Natural/Earth tone
3	Weight per unit area (min.)	ASTM - 3776C	20 oz/sq.yd (700g/m ²)
4	Wide width tensile - Dry (min.)	ASTM D 4595-86	54 lbs/in.
5	Maximum Elongation - Dry MD/CD (%)	ASTM D 4595-86	51/36
6	Wide width tensile - Wet (min.)	ASTM D 4595-86	41 lbs/in.
7	Maximum Elongation- Wet MD/CD (%)	ASTM D 4595	64/48
8	Open Area	Measured	50%

5.3.3. EXECUTION

1. Erosion control blanket shall be placed along the outside of all bends and along both sides of the channel in riffle areas within the disturbance limits as shown in the Construction Drawings, or as directed by the Engineer. Placement of the material shall be accomplished without damage to installed material or without deviation to finished grade.

2. Before installing erosion control blanket, the upper 3-4 inches of soil should be tilled and raked level, followed by seeding and mulching as described in the Construction Drawings. Permanent seeding and

mulching is a condition required under ITEM 5.2 – SEEDING AND MULCHING.

3. Blanket shall be laid parallel to flow. Overlap between adjacent runs of blanket shall be a minimum of 6 inches. Blanket shall overlap in the downstream direction parallel to flow and down-slope perpendicular to flow. The top of the blanket shall be buried in a 6-inch deep trench and secured with 36-inch wooden stakes. The stakes shall be installed at a rate consistent with manufacturer recommendations. If, after staking the blanket, it is possible to lift the blanket away from the soil by hand pulling, additional stakes shall be applied until the fabric is secured.

4. Secure the blanket to the ground by installing fasteners at a rate of 4 per square yard. Nominal spacing is 24 inches perpendicular to flow and 24 inches parallel to flow. Blanket shall be secured to the ground such that blanket does not separate from ground more than 1 inch with a reasonable tug. Additional fasteners will be required if blanket fails this test.

5. Terminal ends of blanket shall be secured by fasteners spaced 6 inches apart.

5.3.4. MEASUREMENT AND PAYMENT

1. Measurement for ITEM 5.3 – EROSION CONTROL BLANKET shall be per Square Yard, satisfactorily installed.

2. Payment for all work described above including labor, materials, and equipment, complete and accepted, shall be at the unit price bid per square yard for ITEM 5.3– EROSION CONTROL BLANKET. Payment as specified shall be considered full compensation for all labor, materials, equipment and incidentals necessary to perform the Work as required, including blanket, stakes, and all tools for installation.

5.4 LIVE STAKES

All portions of ODOT Specification Number 611 – Planting Trees, Shrubs, Perennials, and Vines apply to this section, with the following provisions:

5.4.1. GENERAL

Description of Work. This work shall consist of harvesting, transporting, installing, and maintaining live stake materials as specified on the Construction Drawings or as directed by the Engineer.

5.4.2. MATERIALS

1. Live cuttings for live stakes shall be 0.5 to 1.5 inches in diameter and 2.5 to 4.0 feet in length. Side branches shall be removed and the bark left intact prior to installation. Buds on the stakes shall be oriented in an upward position. The basal ends shall be cut at a 45-degree angle for easy insertion into the soil. The top shall be cut smooth and square without cracks.

2. Live stakes shall consist of a mix of the species shown on the Construction Drawings. Any proposed species substitutions or changes in percent composition of species shall require prior written approval by the Engineer. Only specified tree species will be accepted; no cultivated varieties (cultivars) will be accepted. All materials and construction techniques shall be inspected and approved by the Engineer prior to installation.

3. The source of all live cuttings shall be from purchased stock or located on-site, or within 25 miles of the project site. The Contractor shall locate, flag, and code the live cutting sites. The Contractor shall notify the Engineer 72 hours prior to harvesting to review and approve all harvesting sites. Upon approval by the Engineer, the Contractor shall be responsible for harvesting and transporting the cuttings to the job site.

4. If the Contractor is unable to locate sufficient harvesting sites for the live stakes, upon approval from the Engineer, the Contractor may purchase material from a State-certified nursery. The material shall meet all of the specifications found in this section.

5. Substitutions. Any proposed species substitutions or changes in percent composition of species shall require prior written approval by the Engineer. Only specified plant species will be accepted. No cultivated varieties (cultivars) are acceptable.

5.4.3. EXECUTION

1. The harvest and installation of Live Stakes shall be performed only during the dormant season between November 31 and March 31. When special conditions warrant a variance to the planting operations, proposed planting times shall be submitted for approval by the Engineer.

2. The Contractor shall notify the Engineer 72 hours prior to harvesting to review and approve all harvesting sites. The Contractor shall locate, flag, and code the live cutting sites. Upon approval by the Engineer, the Contractor shall be responsible for harvesting and transporting the cuttings to the job site.

3. Shrubs and young trees used in preparation of live stakes shall be cut directly above the ground. All cuts shall be smooth and the cut surface kept small. The use of large pruning shears or power saws may be required. Trees that are more than 3 inches in diameter shall be topped. The live materials shall be transported to the construction site within 24 hours of harvesting and then cut to size, as specified in the details of the Construction Drawings.

4. Live materials must be protected against drying out and overheating before/during transport (e.g., they shall be covered, transported in unheated vehicles, moistened, kept in soak pits) and on-site prior to installation (e.g., by storing in controlled conditions, storing in shade, covering with evergreen branches or plastic, placing in moist soil, or spraying with anti-transparent chemicals). Live materials shall receive continuous shade, shall be sheltered from the wind, and shall be continuously protected from drying by being heeled into moist soils. Where water is available, live cuttings shall be sprayed or immersed. Warm water (over 150 degrees F) stimulates growth and should be used only upon the approval of the Engineer. Any costs associated with such storage are incidental to the overall unit costs. Live materials shall be installed the same day that the cuttings are harvested. If installation of live materials cannot be accomplished on the same day and storage is required, live materials shall be stored for a period no longer than two (2) days. Any storage of live materials must be approved by the Engineer prior to storing.

5. Gently drive live stakes through the erosion control fabric and into the ground so that approximately 80% percent of the stake is below the ground surface. The Contractor shall use a rubber mallet for driving the stake directly into the ground or drive a pilot hole, smaller in diameter than the live stake, and then drive the live stake into the pilot hole. Stagger the live stakes in a random pattern throughout the specified planting area at a density of 1 live stake per square yard, or as directed by the Engineer. Live stakes shall be installed between the low flow water surface and bankfull elevation.

6. Live stakes split during installation may be left in place, but must be supplemented with a new live stake that remains un-split after installation.

5.4.4. WARRANTY

The Contractor shall maintain an 18-month, 85 percent care and replacement warranty for all live stakes. The period of care and replacement shall begin after inspection and approval of the initial installation of all live stakes and continue for 18-months, with one potential replacement period. The Contractor will not be responsible for live stakes that have been damaged by vandalism, fire, flooding or other activities

beyond the Contractor's control. It will be the Contractor's responsibility to supply water if there is none available on the site. Any costs associated with supplying water shall be the responsibility of the Contractor and shall be included in the unit cost of the live staking installation.

5.4.5. MEASUREMENT AND PAYMENT

1. Measurement for ITEM 5.4 – LIVE STAKES shall be per each, satisfactorily installed.
2. Payment for shall be at the unit price indicated on the Bid Schedule. Payment as specified shall be considered full compensation for all labor, materials, equipment and incidentals necessary to perform the Work as required.

5.5 WETLAND PLUGS

All portions of ODOT Specification Number 611 – Planting Trees, Shrubs, Perennials, and Vines apply to this section, with the following provisions:

5.5.1. GENERAL

Description of Work. This work shall consist of furnishing, installing, and maintaining wetland plug materials as specified on the Construction Drawings or as directed by the Engineer.

5.5.2. MATERIALS

1. Plugs shall be approximately 2 inches wide by 5 inches deep and shall be thoroughly rooted through the container.
2. Plugs shall be handled per the nursery instructions prior to installation to minimize losses prior to planting. Dead plugs or those with obvious signs of stress shall be immediately replaced by the Contractor.
3. Plug species shall be as indicated in the planting plan.
4. Substitutions. Any proposed species substitutions or changes in percent composition of species shall require prior written approval by the Engineer. Only specified plant species will be accepted. No cultivated varieties (cultivars) are acceptable.

5.5.3. EXECUTION

1. Planting is recommended between March 15 and October 15. Plants installed in summer will require supplemental irrigation. It will be the Contractor's responsibility to supply water if there is none available on the site. Plants installed after October 15 will require anchoring to prevent frost heaving. Irrigation and anchoring are considered incidental to this item.
2. Live materials must be protected against drying out and overheating before/during transport and on-site prior to installation (e.g., they shall be covered, transported in unheated vehicles, moistened, kept in soak pits). Losses of live material due to improper handling will be replaced at Contractor cost.
3. Lay out planting area per spacing indicated in the planting plan. Plugs should be placed in a random pattern maximizing species diversity.
4. Dig a hole just large enough for the plug using a shovel, tile spade, dibble bar, or auger.
5. Gently remove the plug from the nursery flat, taking care not to damage roots and minimize loss of attached soil.
6. Place the plug in the hole and pack soil around the plug by hand, taking care to cover all roots with soil.
7. Plugs with obvious signs of stress may be installed, but must be supplemented with an un-stressed new

plug for each stressed plug.

5.5.4. MEASUREMENT AND PAYMENT

1. Measurement for ITEM 5.5 – WETLAND PLUGS shall be per each, satisfactorily installed. Supplemental irrigation and anchoring, as described above, are considered incidental to this item.
2. Payment for shall be at the unit price indicated on the Bid Schedule. Payment as specified shall be considered full compensation for all labor, materials, equipment and incidentals necessary to perform the Work as required.