

City of Fayetteville Staff Review Form

2022-0037

Legistar File ID

2/1/2022

City Council Meeting Date - Agenda Item Only
N/A for Non-Agenda Item

Peter Nierengarten

1/14/2022

SUSTAINABILITY/RESILIENCE (631)

Submitted By

Submitted Date

Division / Department

Action Recommendation:

Approval of a Construction Contract with Flow State for Tanglewood Branch Restoration in the Lower Ramble for a not to exceed amount of \$453,922 and approval of a budget adjustment.

Budget Impact:

4608.860.7800-5804.00 / 4604.860.7800-5804.00
4601.860.7426-5817.00 / 4601.860.7800-5804.00

Arts Corridor 2019 Bonds
Drainage Projects 2019 Bonds
Bond Program Grant Matching

Account Number

46080.7800
46040.7800
46040.7426

Fund

Arts Corridor 2019 Bonds - Arts Corridor Improvements
Drainage Projects 2019 Bonds - Arts Corridor Improvements
Bond Program Grant Matching - Stream Restoration EPA Grant

Project Number

Project Title

Budgeted Item? Yes

Current Budget \$ 4,007,823.00

Funds Obligated \$ 3,564,399.28

Current Balance \$ 443,423.72

Does item have a cost? Yes

Item Cost \$ 453,922.00

Budget Adjustment Attached? Yes

Budget Adjustment \$ 30,220.00

Remaining Budget \$ 19,721.72

V20210527

Purchase Order Number: _____

Previous Ordinance or Resolution # 59-20 & 155-20

Change Order Number: _____

Approval Date: _____

Original Contract Number: _____

Comments:



MEETING OF FEBRUARY 1, 2022

TO: Mayor and City Council

THRU: Susan Norton, Chief of Staff

FROM: Peter Nierengarten, Environmental Director

DATE: January 14, 2022

SUBJECT: **Approval of a Construction Contract with Flow State for Tanglewood Branch Restoration in the Lower Ramble for a not to exceed amount of \$453,922 and approval of a budget adjustment.**

RECOMMENDATION:

Staff recommends approval of a resolution authorizing the Mayor to sign a construction contract with Flow State for Tanglewood Branch Restoration in the Lower Ramble for a not to exceed amount of \$453,922 and approval of a budget adjustment.

BACKGROUND:

The Ramble is a new 50-acre outdoor public corridor that will help to revitalize Fayetteville's downtown area and create a destination for residents and visitors. Linking the City's key cultural institutions—including the Walton Arts Center, TheatreSquared, Nadine Baum Studios, Fayetteville Public Library, and the University of Arkansas' Art and Design District—the corridor will showcase and celebrate local arts culture. It will also enhance civic space and serve as a catalyst for additional development and density in the downtown area, increasing bike trails and connections, and improving streets and walkability. This project is part of the Cultural Arts Corridor Bond package approved by Fayetteville voters in April 2019.

Construction on the Lower Ramble in the Fay Jones Woods and along the southern portions of West Avenue and the Razorback Greenway began in September 2020 and will be completed by the City's primary contractor in the Spring of 2022. Part of the construction work that was not included in the primary contract is the highly specialized stream restoration work along Tanglewood Branch within the Lower Ramble.

Tanglewood Branch is a tributary to the West Fork of the White River and is likely the most urbanized sub-watershed in Beaver Lake drainage area. The City, in partnership with the Watershed Conservation Resource Center (WCRC), was successful in being awarded an EPA Region 6 Wetlands Development Program grant in the amount of \$217,702 in 2019 to help partially fund this stream restoration work.

DISCUSSION:

The Tanglewood Branch restoration project will emphasize nature-based channel design solutions, native materials and ecoregion-based vegetation establishment to restore the health of the entire riparian corridor. The work will consist of:

- 1100 Linear Feet of Primary Channel Improvements along Tanglewood Branch
- 350 Linear Feet of Ephemeral Stream Channel Improvements along a Tributary to Tanglewood Branch
- Erosion Control and Bank Stabilization
- Riparian Replanting Utilizing Native Trees and Plants
- Aquatic Habitat Improvement

The stream restoration and riparian improvement work will serve to support the larger sustainability and stormwater objectives of the Ramble project. A healthy stream and riparian buffer will support wildlife and improve water quality and create a unique opportunity for the site to serve as an education tool on the native riparian and woodland vegetation of the Ozark Mountains. The project will demonstrate several newly developed stream restoration techniques that will restore natural ecosystem services to this heavily urbanized area.

The construction work is schedule to take approximately 2 months and be completed by April 2022 in tandem with the primary contractor's work within the Lower Ramble.

BUDGET/STAFF IMPACT:

The cost for the construction contract is \$453,922, with funding for the restoration work coming from the 2019 Cultural Arts Corridor and Drainage Bonds, and the EPA Region 6 Grant. The budget breakout is shown in the table below:

Account	Project	Amount
4601.860.7426-5817.00 - Improvements Bridge & Drainage	46040.7426	195,000
4604.860.7800-5804.00 - Building Costs	46040.7800	40,500
4601.860.7800-5804.00 - Building Costs	46080.7800	188,202
4608.860.7800-5804.00 - Building Costs	46080.7800	30,220
TOTAL		453,922

Attachments:

Agreement for Construction of Tanglewood Branch Restoration
Budget Adjustment



**AGREEMENT FOR CONSTRUCTION OF
BID 21-50, CONSTRUCTION – TANLEWOOD BRANCH RESTORATION
BETWEEN CITY OF FAYETTEVILLE (OWNER)
AND
FLOW STATE, LLC (CONTRACTOR / VENDOR)**

THIS AGREEMENT is made this _____ day of _____, **2022**, by and between City of Fayetteville, Arkansas, acting by and through its Mayor (hereinafter called CITY OF FAYETTEVILLE or CITY) and **FLOW STATE, LLC** (Vendor or **Flow State**).

CONTRACTED PARTIES & ADDRESSES FOR NOTICES:

Owner: **City of Fayetteville, AR**
113 W. Mountain
Fayetteville, AR 72701
Notices, Attention: Lioneld Jordan

Contractor: **Flow State, LLC**
6 E Elm St.
Fayetteville, AR 72703
Notices, Attention: John Chapman

Tax identification number (TIN) ending in 9123
Arkansas Contractor License No. 0421220323
Secretary of State Filing No. 811266407

ENTIRE AGREEMENT AND EXHIBITS:

This Agreement sets forth the entire agreement and understanding between the parties on the subject matter of this Agreement. Neither party shall be bound by any conditions, definitions, representations or warranties with respect to the subject matter of this Agreement other than those as expressly provided herein.

1. Appendices included under this agreement include the following:
 - a. **Appendix A:** Bid package identified as **Bid 21-50, Construction – Tanglewood Branch Restoration** with the specifications and conditions typed thereon inclusive of all bidding documents, plans and drawings and issued addenda.
 - b. **Appendix B:** **Flow State, LLC** bid submittal
 - c. **Appendix C:** Bid 21-50, Bid Tabulation
 - d. **Appendix D:** **Flow State** Certificate of Insurance



AGREEMENT FOR CONSTRUCTION:

ARTICLE 1 – WORK

1.01 Contractor shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows:

RESTORATION OF APPROXIMATELY 1200 FT SECTION OF TANGLEWOOD BRANCH AND ITS UNNAMED TRIBUTARY TO THE SOUTHEAST THAT WILL REDUCE STREAMBANK EROSION AND IMPROVE AQUATIC AND TERRESTRIAL HABITAT.

ARTICLE 2 – THE PROJECT

2.01 The Project, of which the Work under the Contract Documents is a part, is generally described as follows: Work includes building stacked rock walls, reinforcing existing historic walls, removing construction debris and a debris jam, installing boulder riffle grade control structures, and creating step pools.

ARTICLE 3 – ENGINEER

- 3.01 The Project has been designed by Watershed Conservation Resource Center.
- 3.02 The Owner has retained Watershed Conservation Resource Center ("Engineer") to act as Owner's representative, assume all duties and responsibilities, and have the rights and authority assigned to Engineer in the Contract Documents in connection with the completion of the Work in accordance with the Contract Documents.

ARTICLE 4 – CONTRACT TIMES

4.01 Time of the Essence

- A. All time limits for Milestones, if any, Substantial Completion, and completion and readiness for final payment as stated in the Contract Documents are of the essence of the Contract.

4.02 Contract Times: Days

- A. The Work will be substantially completed within 60 days after the date when the Contract Times commence to run as provided in Paragraph 4.01 of the General Conditions, and completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions within 75 days after the date when the Contract Times commence to run.

4.03 Liquidated Damages

- A. Contractor and Owner recognize that time is of the essence as stated in Paragraph 4.01 above and that Owner will suffer financial and other losses if the Work is not completed and Milestones not achieved within the times specified in Paragraph 4.02 above, plus any extensions thereof allowed in accordance with the Contract. The parties also recognize the delays, expense, and difficulties involved in proving in a



legal or arbitration proceeding the actual loss suffered by Owner if the Work is not completed on time. Accordingly, instead of requiring any such proof, Owner and Contractor agree that as liquidated damages for delay (but not as a penalty):

1. Substantial Completion: Contractor shall pay Owner \$ 250 for each day that expires after the time (as duly adjusted pursuant to the Contract) specified in Paragraph 3.02.A above for Substantial Completion until the Work is substantially complete.

ARTICLE 5 – CONTRACT PRICE

5.01 Owner shall pay Contractor for completion of the Work in accordance with the Contract Documents the amounts that follow, subject to adjustment under the Contract:

- A. This turn-key project providing labor and materials shall be provided to the City for a not to exceed fee of \$453,922.00 US Dollars in accordance with unit pricing provided in **Appendix C – Bid Tabulation**.
- B. The extended prices for Unit Price Work set forth as of the Effective Date of the Contract are based on estimated quantities. As provided in Paragraph 13.03 of the General Conditions, estimated quantities are not guaranteed, and determinations of actual quantities and classifications are to be made by Engineer.

ARTICLE 6 – PAYMENT PROCEDURES

6.01 *Submittal and Processing of Payments*

- A. Contractor shall submit Applications for Payment in accordance with Article 15 of the General Conditions. Applications for Payment will be processed by Engineer as provided in the General Conditions.

6.02 *Progress Payments; Retainage*

- A. Owner shall make progress payments on account of the Contract Price on the basis of Contractor's Applications for Payment on or about the 15th day of each month during performance of the Work as provided in Paragraph 6.02.A.1 below, provided that such Applications for Payment have been submitted in a timely manner and otherwise meet the requirements of the Contract. All such payments will be measured by the Schedule of Values established as provided in the General Conditions (and in the case of Unit Price Work based on the number of units completed) or, in the event there is no Schedule of Values, as provided elsewhere in the Contract.
 1. Prior to Substantial Completion, progress payments will be made in an amount equal to the percentage indicated below but, in each case, less the aggregate of payments previously made and less such amounts as Owner may withhold, including but not limited to liquidated damages, in accordance with the Contract

-
- a. 95 percent of Work completed (with the balance being retainage).; and



- b. 100 percent of cost of materials and equipment not incorporated in the Work (with the balance being retainage).
 - c. Retainage shall be 5% of the earned progress payments per Arkansas Code 22-9- 604.
- B. Upon Substantial Completion, Owner shall pay an amount sufficient to increase total payments to Contractor to 95 percent of the Work completed, less such amounts set off by Owner pursuant to Paragraph 15.01.E of the General Conditions, and less 100 percent of Engineer's estimate of the value of Work to be completed or corrected as shown on the punch list of items to be completed or corrected prior to final payment.

6.03 Final Payment

- A. Upon final completion and acceptance of the Work in accordance with Paragraph 15.06 of the General Conditions, Owner shall pay the remainder of the Contract Price as recommended by Engineer as provided in said Paragraph 15.06.

ARTICLE 7 – INTEREST

7.01 All amounts not paid when due shall bear interest at the rate of 0 percent per annum.

ARTICLE 8 – CONTRACTOR'S REPRESENTATIONS

8.01 In order to induce Owner to enter into this Contract, Contractor makes the following representations:

- A. Contractor has examined and carefully studied the Contract Documents, and any data and reference items identified in the Contract Documents.
- B. Contractor has visited the Site, conducted a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
- C. Contractor is familiar with and is satisfied as to all Laws and Regulations that may affect cost, progress, and performance of the Work.
- D. Contractor has considered the information known to Contractor itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Contract Documents; and the Site-related reports and drawings identified in the Contract Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor; and (3) Contractor's safety precautions and programs.
- E. Based on the information and observations referred to in the preceding paragraph, Contractor agrees that no further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price,



within the Contract Times, and in accordance with the other terms and conditions of the Contract.

- F. Contractor is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Contract Documents.
- G. Contractor has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.
- H. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.
- I. Contractor's entry into this Contract constitutes an incontrovertible representation by Contractor that without exception all prices in the Agreement are premised upon performing and furnishing the Work required by the Contract Documents.

ARTICLE 9 – CONTRACT DOCUMENTS

9.01 Contents

- A. The Contract Documents consist of the following:
 - 1. This Agreement (Current Section, inclusive of all Appendices).
 - 2. Performance bond (Section: Performance Bond, inclusive).
 - 3. Payment bond (Section: Payment Bond, inclusive).
 - 4. Other bonds.
 - a. Maintenance and Warranty Bond (to be provided following Substantial Completion) (If required).
 - 5. The following which may be delivered or issued on or after the Effective Date of the Contract and are not attached hereto:
 - a. Notice to Proceed.
 - b. Work Change Directives.
 - c. Change Orders.
 - d. Field Orders.
 - B. The documents listed in Paragraph 9.01.A are attached to this Agreement (except as expressly noted otherwise above).
 - C. There are no Contract Documents other than those listed above in this Article 9.
 - D. The Contract Documents may only be amended, modified, or supplemented as provided in the General Conditions.
-



ARTICLE 10 – MISCELLANEOUS

10.01 Terms

- A. Terms used in this Agreement will have the meanings stated in the General Conditions and the Supplementary Conditions.

10.02 Assignment of Contract

- A. Unless expressly agreed to elsewhere in the Contract, no assignment by a party hereto of any rights under or interests in the Contract will be binding on another party hereto without the written consent of the party sought to be bound; and, specifically but without limitation, money that may become due and money that is due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.

10.03 Successors and Assigns

- A. Owner and Contractor each binds itself, its successors, assigns, and legal representatives to the other party hereto, its successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

10.04 Severability

- A. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon Owner and Contractor, who agree that the Contract Documents shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

10.05 Contractor's Certifications

- A. Contractor certifies that it has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for or in executing the Contract. For the purposes of this Paragraph 10.05:
 - 1. "corrupt practice" means the offering, giving, receiving, or soliciting of any thing of value likely to influence the action of a public official in the bidding process or in the Contract execution;
 - 2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process or the execution of the Contract to the detriment of Owner, (b) to establish Bid or Contract prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
 - 3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish Bid prices at artificial, non-competitive levels; and



CITY OF
FAYETTEVILLE
ARKANSAS

4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

10.06 Other Provisions

- A. Owner stipulates that if the General Conditions that are made a part of this Contract are based on EJCDC® C-700, Standard General Conditions for the Construction Contract, published by the Engineers Joint Contract Documents Committee®, and if Owner is the party that has furnished said General Conditions, then Owner has plainly shown all modifications to the standard wording of such published document to the Contractor, through a process such as highlighting or "track changes" (redline/strikeout), or in the Supplementary Conditions.

IN WITNESS WHEREOF, CITY OF FAYETTEVILLE, ARKANSAS by and through its Mayor, and **VENDOR NAME** by its authorized officer have made and executed this Agreement as of the day and year first above written.

CITY OF FAYETTEVILLE, ARKANSAS

By: _____
Lioneld Jordan, Mayor

FLOW STATE, LLC

By: _____
John Chapman, Owner

ATTEST:

By: _____
Kara Paxton, City Clerk

Date Signed: _____

Date Signed: 1/12/22

PERFORMANCE BOND

CONTRACTOR (name and address):

Flow State, LLC
6 E Elm Street,
Fayetteville, AR 72703

SURETY (name and address of principal place of business):

Great American Insurance Company
301 East 4th Street,
Cincinnati, OH 45202

OWNER (name and address):

City of Fayetteville, AR
113 W. Mountain St, Fayetteville, AR 72702

CONSTRUCTION CONTRACT

Effective Date of the Agreement:

Amount: Four Hundred Fifty Three Thousand Nine Hundred Twenty Two and 00/100 Dollars (\$453,922.00)

Description (name and location): 21-50 Construction - Tanglewood Branch Restoration

BOND

Bond Number: 4069699

Date (not earlier than the Effective Date of the Agreement of the Construction Contract):

Amount: Four Hundred Fifty Three Thousand Nine Hundred Twenty Two and 00/100 Dollars (\$453,922.00)

Modifications to this Bond Form: ☒ None ☐ See Paragraph 16

Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth below, do each cause this Performance Bond to be duly executed by an authorized officer, agent, or representative.

CONTRACTOR AS PRINCIPAL

Flow State, LLC

(seal)

Contractor's Name and Corporate Seal

By:

Signature

John Chapman

Print Name

Owner

Title

Attest:

Signature

Crystal Rust, Witness

Title

SURETY

Great American Insurance Company

(seal)

Surety's Name and Corporate Seal

By:

Signature (attach power of attorney)

Laura D. Mosholder

Print Name

Attorney-in-Fact

Title

Attest:

Signature

Kailee Stone, Witness

Title

Notes: (1) Provide supplemental execution by any additional parties, such as joint venturers. (2) Any singular reference to Contractor, Surety, Owner, or other party shall be considered plural where applicable.

PAYMENT BOND

CONTRACTOR (name and address):

Flow State, LLC
6 E Elm Street,
Fayetteville, AR 72703

OWNER:

City of Fayetteville, AR
113 W Mountain St
Fayetteville, AR 72702

SURETY (name and address of principal place of business):

Great American Insurance Company
301 East 4th Street,
Cincinnati, OH 45202

CONSTRUCTION CONTRACT

Effective Date of the Agreement:

Amount: Four Hundred Fifty Three Thousand Nine Hundred Twenty Two and 00/100 Dollars (\$453,922.00)

Description (name and location): 21-50 Construction - Tanglewood Branch Restoration

BOND

Bond Number: 4069699

Date (not earlier than the Effective Date of the Agreement of the Construction Contract):

Amount: Four Hundred Fifty Three Thousand Nine Hundred Twenty Two and 00/100 Dollars (\$453,922.00)

Modifications to this Bond Form: ☒ None ☐ See Paragraph 18

Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth below, do each cause this Payment Bond to be duly executed by an authorized officer, agent, or representative.

CONTRACTOR AS PRINCIPAL**SURETY**

Flow State, LLC

(seal)

Contractor's Name and Corporate Seal

By:

Signature

John Chapman

Print Name

Owner

Title

Attest:

Signature

Crystal Rust, witness

Title

Great American Insurance Company

(seal)

Surety's Name and Corporate Seal

By:

Signature (attach power of attorney)

Laura D. Mosholder

Print Name

Attorney-in-Fact

Title

Attest:

Signature

Kailee Stone, Witness

Title

Notes: (1) Provide supplemental execution by any additional parties, such as joint venturers. (2) Any singular reference to Contractor, Surety, Owner, or other party shall be considered plural where applicable.



CITY OF
FAYETTEVILLE
ARKANSAS

Contract for Bid 21-50
Tanglewood Branch Restoration
Appendix A
City Bid Package



CITY OF
FAYETTEVILLE
ARKANSAS

City of Fayetteville, Arkansas

Purchasing Division – Room 306

113 W. Mountain

Fayetteville, AR 72701

Phone: 479.575.8289

TDD (Telecommunication Device for the Deaf): 479.521.1316

INVITATION TO BID

Bid 21-50, Construction – Tanglewood Branch Renovations

DEADLINE: WEDNESDAY, NOVEMBER 17, 2021 before 2:00 PM, Local Time

PRE-BID MEETING: Tuesday, October 26, 2021 at 10:00 AM, at the jobsite

ACCEPTABLE DELIVERY METHODS:

- (1) City's electronic bidding platform OR
- (2) sealed and delivered directly to the City of Fayetteville as instructed in the advertisement

PURCHASING AGENT: Jonathan Smith, jonsmith@fayetteville-ar.gov

DATE OF ISSUE & ADVERTISEMENT: Sunday, 10/17/2021 & 10/24/2021

No late bids will be accepted. Bids shall be submitted in one of the following methods: (1) through the City's third-party electronic bidding platform, Bonfire, or (2) delivering in person via sealed envelope to the City of Fayetteville Purchasing Division. Submitting through the City's electronic bidding platform is strongly encouraged. All bids shall be submitted in accordance with the attached City of Fayetteville specifications and bid documents attached hereto. Each bidder is required to fill in every blank and shall supply all information requested; failure to do so may be used as basis of rejection.

NOTICE TO ALL BIDDERS:

All interested parties can obtain files for this project by going to <http://fayetteville-ar.gov/bids>. Bid documents shall be distributed electronically from the City of Fayetteville Purchasing Division only.

BID PACKAGE INCLUDES THE FOLLOWING FILES WHICH SHALL BE LISTED UNDER "PUBLIC FILES":

FILE #01: PROJECT MANUAL – 189 total pages

FILE #02: DRAWINGS – 25 Plan Sheets

*Additional files added as addendums are issued. Addendums will be uploaded and posted to the City's electronic bidding platform.

***PLAN HOLDER LISTINGS:** A listing of vendors who have received documents can be found in the City's electronic bidding platform under the projects section titled document takers.

Bidder shall assume all responsibility for receiving updates and any addenda issued to this project by monitoring <http://fayetteville-ar.gov/bids>. Failure to acknowledge addenda issued as instructed could result in bid rejection.

THIS PAGE INTENTIONALLY LEFT BLANK

Contract - Bid 2150
Tanglewood Branch Restoration
Appendix A - City Bid Package



Project Check List

This checklist is for the Bidder's use in preparing & submitting a bid. It is not intended to include all details necessary to prepare a bid and shall not be used as a substitute for the requirements of the bid documents. Information is shown below only as a matter of convenience. Use of this checklist does not relieve the Bidder from the responsibility of meeting all requirements of the Specifications concerning the preparation of an acceptable bid. Bidders are welcome to use this form as a coversheet for a sealed envelope; however, using this form itself is NOT a requirement.

☐

5% Bid Bond of the amount bid accompanied by required documentation (Power of Attorney, etc.)

- In lieu of a bid bond, the bidder may submit a cashier's check from a bank located in the State of Arkansas for at least five percent (5%) of the amount bid (inclusive of any deductive alternates). Cashier's checks shall be made payable to the City of Fayetteville, AR and received prior to the bid deadline by making an in-person delivery appointment with the City Purchasing Division.
- Upload 5% bid bond to the City's electronic bidding platform (preferred) OR attach bid bond with physical submittal and setting up an in-person delivery appointment with the City Purchasing Division.

☐

All addenda shall be signed, acknowledged, and submitted on the appropriate forms (submitting the actual addendums or marking acknowledgement on other bid pages).

☐

All line items shall be appropriately filled out and extended to reveal the line item price as well as the total bid price. Total base bid should be calculated in the provided space.

☐

All pages provided with signature lines shall be appropriately signed, dated accordingly, and included with submitted bid documents

☐

All bids shall be received before the stated deadline utilizing the City's electronic bidding platform or submitting a physical sealed bid to the location listed below. Submitting a bid electronically is strongly encouraged. A public bid opening will be conducted shortly after the deadline at City Hall and livestreamed at <https://www.youtube.com/user/cityoffayettevillear>. Late or misdirected bids shall not be accepted. The City of Fayetteville shall not be responsible for lost or misdirected bids, or failure of bidder's technical equipment. All bid documents shall be delivered in a sealed envelope to the address stated in the advertisement or updated deadline issued via Addenda. All bids should be delivered with the name of the bidder (contractor) on the sealed envelope as well as the bidders Arkansas Contractor's License Number.

City of Fayetteville, AR
Purchasing Division – Suite 306
113 W. Mountain
Fayetteville, AR 72701

☐

Additional Information Required:

- List of Subcontractors: Submit form on electronic bidding portal or attach if submitting a physical bid
- AR Secretary of State Filing: _____ or filing number for the state Contractor is established, or submit on the City's electronic bidding platform
- Arkansas Contractor License# or date of application: _____ or submit on the City's electronic bidding platform
- Pursuant Arkansas Code Annotated §25-1-503, the Contractor agrees and certifies that they do not currently boycott Israel and will not boycott Israel during any time in which they are entering into, or while in contract, with any public entity as defined in §25-1-503. If at any time during contract the contractor decides to boycott Israel, the contractor must notify the contracted public entity in writing.
 - Submit on City's electronic bidding platform (preferred), OR circle applicable answer: YES or NO

THIS PAGE INTENTIONALLY LEFT BLANK

Contract - Bid 2150
Tanglewood Branch Restoration
Appendix A - City Bid Package

City of Fayetteville, Arkansas
INVITATION TO BID
Bid 21-50, Construction – Tanglewood Branch Restoration

The City of Fayetteville, AR (owner) is accepting formal, sealed bids from properly qualified, experienced and licensed contractors for furnishing all labor, tools, and equipment needed for the construction of the 'Tanglewood Branch Channel Restoration and Aquatic Habitat Improvement Project', located in Washington County and Fayetteville, Arkansas. The project involves but is not limited to restoring a 1,200 ft section of Tanglewood Branch and its un-named tributary to reduce streambank erosion and improve aquatic and terrestrial habitat. Work includes building stacked rock walls, reinforcing existing historic walls, removing non-natural debris from stream channel, and installing boulder riffle grade control structures. All questions during the bidding process shall be addressed to Jonathan Smith, Sr. Purchasing Agent.

A non-mandatory Pre-Bid conference will be held at the jobsite on **Tuesday, October 26, 2021 at 10:00 AM.** Information regarding the pre-bid meeting is available on the project page on the City's electronic bidding platform. All interested parties are encouraged to attend. The City will transmit to all prospective Bidders of record such Addenda in response to questions arising at the conference. Oral statements may not be relied upon and will not be binding or legally effective.

Bidding documents, plans, plan holders, and addenda shall be obtained at the City of Fayetteville Purchasing Division's electronic bidding platform at www.fayetteville-ar.gov/bids. All bids shall be received by **Wednesday, November 17, 2021 before 2:00 PM,** local time. Bidders may submit a bid by utilizing one of the following methods: (1) submitting electronically via the City's electronic bidding portal, (2) by mailing a sealed bid, or (3) submitting a sealed bid in person by contacting the City to make a bid delivery appointment. Mailed and in person bids shall be made at the City of Fayetteville, Purchasing Division address listed below. Submitting a bid electronically is strongly encouraged. A public bid opening will be conducted shortly after the deadline at City Hall and livestreamed at <https://www.youtube.com/user/cityoffayettevillear>. Late or misdirected bids shall not be accepted. The City of Fayetteville shall not be responsible for lost or misdirected bids, or failure of bidder's technical equipment.

City of Fayetteville
Purchasing Division – Room 306
113 West Mountain Street
Fayetteville, AR 72701

Each bid shall be accompanied by a cashier's check from a bank doing business in the State of Arkansas or a corporate bid bond in an amount not less than five (5) percent of the amount bid. In the event a bidder opts to submit a cashier's check for a bid bond, the actual physical cashier's check shall be delivered to the City prior to the deadline. A one hundred percent (100%) performance and payment bond is required with the contract awarded. A State of Arkansas Contractor's License is not required at time of bid; however, an application for licensure shall be required at time of bid and an approved contractor's license shall be required before execution of contract.

Pursuant to Arkansas Code Annotated §22-9-203 The City of Fayetteville encourages all *qualified* small, minority and women business enterprises to bid on and receive contracts for goods, services, and construction. Also, City of Fayetteville encourages all general contractors to subcontract portions of their contract to *qualified* small, minority and women business enterprises.

The City of Fayetteville reserves the right to waive irregularities, reject bids, and postpone the award of any Contract for a period which shall not exceed beyond ninety (90) days from the bid opening date.

The City hereby notifies all bidders that this contract is subject to the Code of Federal Regulations, Appendix II, Part 200, Contract Provisions for Non-Federal Entity Contracts under Federal Awards applies to this contract and includes but is not limited to termination for cause and for convenience, Equal Employment Opportunity, Davis-Bacon Act, Copeland Anti-Kickback Act, Contract Work Hours and Safety Standards Act, Clean Air Act, Debarment and Suspension regulations, conditions under the Byrd Anti-Lobbying Amendment, applicable labor laws, non-discrimination provisions, wage rate laws and other federal laws including the Fair Labor Standards Act of 1938. The Work Hours Act of 1962 and Title VI of the Civil Rights Act of 1964 also apply. Bidders are hereby notified of the NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (EXECUTIVE ORDER 11246).

All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.

City of Fayetteville

By: Jonathan Smith

City Purchasing Agent

P: 479.575.8220 Email: jonsmith@fayetteville-ar.gov

TDD (Telecommunications Device for the Deaf): (479) 521-1316

Date of advertisement: 10.17.2021 & 10.24.2021

This publication was paid for by the Purchasing Division of the City of Fayetteville, Arkansas. Amount paid: \$XXX.XX.

Contract - Bid 21-50
Tanglewood Branch Restoration
Appendix A - City Bid Package



PRE-BID MEETING INFORMATION

BID 21-50, CONSTRUCTION – TANGLEWOOD BRANCH RESTORATION

A non-mandatory Pre-Bid conference will be held at the jobsite on **Tuesday, October 26, 2021 at 10:00 AM**. Information regarding the pre-bid meeting will also be posted on the project page on the City's electronic bidding platform.

All interested parties are encouraged to attend. The City will transmit to all prospective Bidders of record such Addenda in response to questions arising at the conference. Oral statements may not be relied upon and will not be binding or legally effective.

- **Pre-Bid Meeting / Jobsite Address:** 221 S. School Ave., Fayetteville, AR 72701
 - This is the physical address for the on-site job trailer (Nabholz)
 - Parking is available on site or attendees can park in the Library parking lot
- **Pre-Bid Meeting Requirements:**
 - This is an **ACTIVE** construction site. All attendees will be required to wear the following while attending the pre-bid meeting:
 - hard hat
 - high visibility safety vest

Contract - Bid 21-50
Tanglewood Branch Restoration
Appendix A - City Bid Package

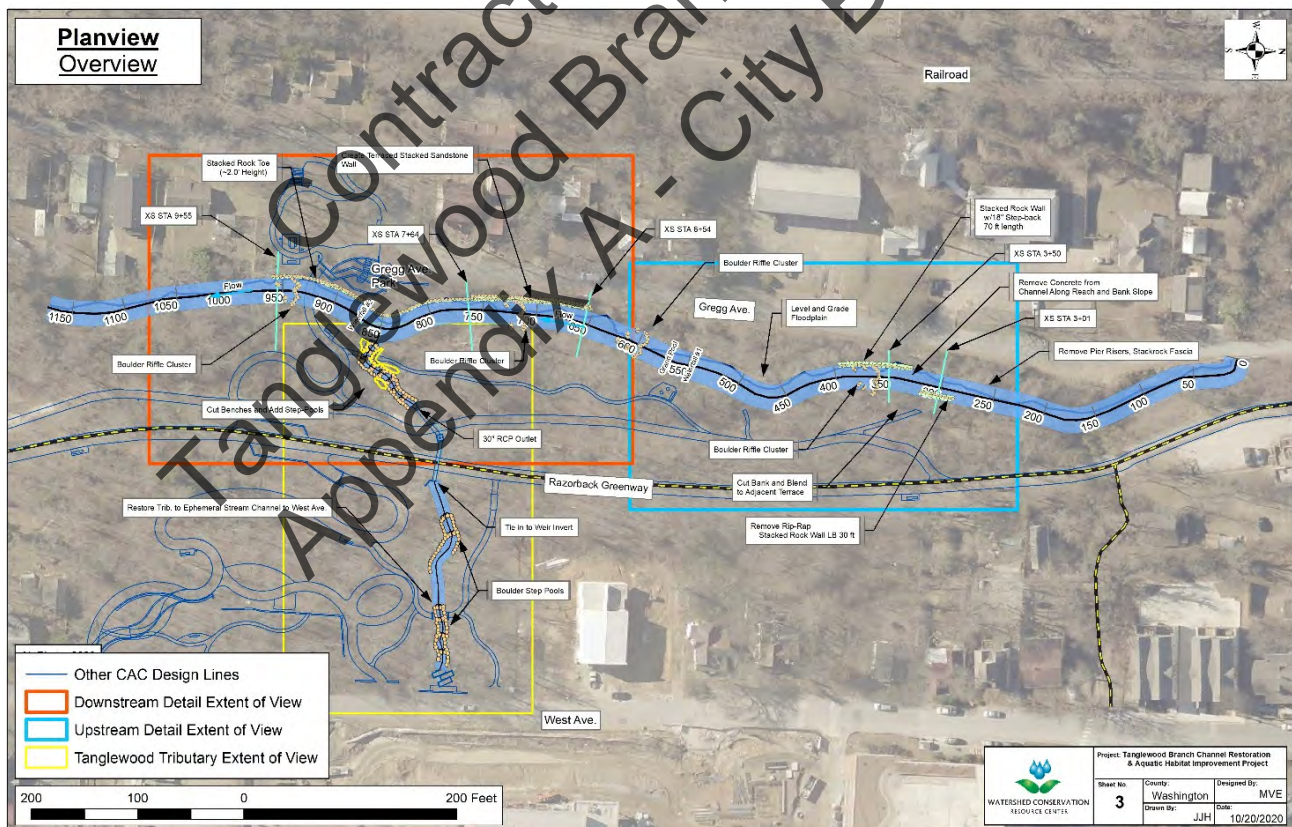
THIS PAGE INTENTIONALLY LEFT BLANK

Contract - Bid 2150
Tanglewood Branch Restoration
Appendix A - City Bid Package

General Requirements & Technical Specifications

Tanglewood Branch Channel Restoration and Aquatic Habitat Improvement Project

Job Number: WCRC-21-01



GENERAL REQUIREMENTS &
TECHNICAL SPECIFICATIONS

TANGLEWOOD BRANCH CHANNEL RESTORATION AND AQUATIC
HABITAT IMPROVEMENT PROJECT

Prepared by:
Watershed Conservation Resource Center
380 West Rock Street
Fayetteville, AR 72701

March 1, 2021

Job Number WCRC-21-01

PROJECT ENGINEER:
Matthew A. Van Eps, P.E.
Watershed Conservation Resource Center





Engineer of Record

TABLE OF CONTENTS:

FILE 01 – PROJECT MANUAL

TANGLEWOOD BRANCH CHANNEL RESTORATION AND AQUATIC HABITAT
IMPROVEMENT PROJECT

GENERAL REQUIREMENTS

- ADVERTISEMENT FOR BIDS
- INSTRUCTIONS TO BIDDERS BID
FORM
- NOTICE OF AWARD
AGREEMENT
- NOTICE TO PROCEED PERFORMANCE
BOND PAYMENT BOND
- CERTIFICATE OF SUBSTANTIAL COMPLETION GENERAL
CONDITIONS
- SUPPLEMENTARY CONDITIONS

WRITTEN SPECIFICATIONS FOR STREAM RESTORATION CONSTRUCTION

- **APPENDIX A**: CONTRACT PROVISIONS FOR NON-FEDERAL ENTITY CONTRACTS UNDER
FEDERAL AWARDS
- **APPENDIX B**: DAVIS-BACON WAGE DETERMINATION NO. 20200002 AS OF 01/01/2020

FILE 02 – DRAWINGS

DRAWINGS

INSTRUCTIONS TO BIDDERS

TABLE OF CONTENTS

	Page
ARTICLE 1 – Defined Terms	1
ARTICLE 2 – Copies of Bidding Documents	1
ARTICLE 3 – Qualifications of Bidders	1
ARTICLE 4 – Site and Other Areas; Existing Site Conditions; Examination of Site; Owner’s Safety Program; Other Work at the Site	2
ARTICLE 5 – Bidder’s Representations	4
ARTICLE 6 – Pre-Bid Conference	5
ARTICLE 7 – Interpretations and Addenda	5
ARTICLE 8 – Bid Security	5
ARTICLE 9 – Contract Times	6
ARTICLE 10 – Liquidated Damages	6
ARTICLE 11 – Substitute and “Or-Equal” Items	6
ARTICLE 12 – Subcontractors, Suppliers, and Others	6
ARTICLE 13 – Preparation of Bid	7
ARTICLE 14 – Basis of Bid	7
ARTICLE 15 – Submittal of Bid	8
ARTICLE 16 – Modification and Withdrawal of Bid	8
ARTICLE 17 – Opening of Bids	8
ARTICLE 18 – Bids to Remain Subject to Acceptance	8
ARTICLE 19 – Evaluation of Bids and Award of Contract	8
ARTICLE 20 – Bonds and Insurance	9
ARTICLE 21 – Signing of Agreement	9
ARTICLE 22 – prevailing wage rates	9
ARTICLE 23 – Contracts to be Assigned – N/A	9
ARTICLE 24 – Retainage	9

ARTICLE 1 – DEFINED TERMS

- 1.01 Terms used in these Instructions to Bidders have the meanings indicated in the General Conditions and Supplementary Conditions. Additional terms used in these Instructions to Bidders have the meanings indicated below:

A. *Issuing Office* – The office from which the Bidding Documents are to be issued.

ARTICLE 2 – COPIES OF BIDDING DOCUMENTS

- 2.01 Complete sets of the Bidding Documents may be obtained from the Issuing Office in the number and format stated in the advertisement or invitation to bid.
- 2.02 Complete sets of Bidding Documents shall be used in preparing Bids; neither Owner nor Engineer assumes any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.
- A. If electronic files are supplied, either CAD, PDF or other format, the Owner nor the Engineer assumes any responsibility for errors or misinterpretations resulting from their use. These files are supplied solely to aid the Bidder and the hardcopy Bidding Documents shall have precedence.
- 2.03 Owner and Engineer, in making copies of Bidding Documents available on the above terms, do so only for the purpose of obtaining Bids for the Work and do not authorize or confer a license for any other use.

ARTICLE 3 – QUALIFICATIONS OF BIDDERS

- 3.01 To demonstrate Bidder's qualifications to perform the Work, Bidder shall include in their Bid submittal (a) written evidence establishing its qualifications such as financial data, previous experience, and present commitments, and (b) the following additional information:
- A. **A State of Arkansas Contractor's License is not required at time of bid; however, a bidder not having a license shall have submitted an application for licensure at time of bid.**
- B. Subcontractor and Supplier qualification information will be required by the Owner.
- C. In determining the qualification of the Prospective Bidder, the following elements will be considered. The Bidder shall have a minimum of five (5) years of experience building stream restoration and streambank stabilization designs using natural channel design (NCD) principles. NCD techniques are presented in Chapter 11 of the USDA Natural Resource Conservation Service National Engineering Handbook, Part 654, Chapter 11, (2007) and Wildland Hydrology Applied Fluvial Geomorphology course manual (most recent). Specifically, the employees who will be building the rock structures shall have a minimum of five (5) years' direct experience building NCD stream restoration and streambank stabilization projects. They shall have experience in constructing J-hook vanes, cross vanes, and step pools on three or more projects. Failure to meet these requirements without approval of the Owner may result in rejection of bid.

EXPERIENCE OF BIDDER:

1. The bidder must include a summary of their experience as indicated below:

2. Provide a general summary of the bidder's experience that states that he/she is an experienced Contractor and has completed a minimum of three (3) projects of similar size and scope as described under the Bidder Qualifications within the past five (5) years.
 3. Provide qualifications and experience of the two (2) primary operators with NCD experience.
 4. Provide a written summary of at least three projects that describes the projects in the context of the qualifications listed above. At least one of the submitted projects must include construction of stacked-rock vanes as shown in the Wildland Hydrology Applied Fluvial Geomorphology course manual. The following information should be included:
 - a. Project name and names of clients
 - b. Project Description including the operators who constructed the project.
 - c. Name of company (including contact) that designed project and completed permitting
 - d. Project manager & phone number,
 - e. Construction costs
 - f. Location of project
 - g. References with telephone numbers that have the capability to verify the information submitted.
 - h. Photographs for all three projects
 - D. The participation of small, minority and women's business enterprises shall be encouraged for all contracts and subcontracts. The Bidder agrees to make all efforts and conduct due diligence outreach in the awarding of contracts or subcontracts to the fullest extent consistent with efficient contract performance. The Bidder further agrees to cooperate in any studies or surveys as may be necessary to determine the extent of the Bidder's compliance with this clause.
- 3.02 A Bidder's failure to submit required qualification information within the times indicated may disqualify Bidder from receiving an award of the Contract.
- 3.03 No requirement in this Article 3 to submit information will prejudice the right of Owner to seek additional pertinent information regarding Bidder's qualifications.
- 3.04 Bidder is advised to carefully review those portions of the Bid Form requiring Bidder's representations and certifications.

ARTICLE 4 – SITE AND OTHER AREAS; EXISTING SITE CONDITIONS; EXAMINATION OF SITE; OWNER'S SAFETY PROGRAM; OTHER WORK AT THE SITE

4.01 Site and Other Areas

- A. The Site is identified in the Bidding Documents. By definition, the Site includes rights-of-way, easements, and other lands furnished by Owner for the use of the Contractor. Any additional lands required for temporary construction facilities, construction equipment, or storage of materials and equipment, and any access needed for such additional lands, are to be obtained and paid for by Contractor.

4.02 Existing Site Conditions

- A. Subsurface and Physical Conditions; Hazardous Environmental Conditions
 1. The Supplementary Conditions identify:

- a. those reports known to Owner of explorations and tests of subsurface conditions at or adjacent to the Site.
 - b. those drawings known to Owner of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities).
 - c. reports and drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site.
 - d. Technical Data contained in such reports and drawings.
2. Owner will make copies of reports and drawings referenced above available to any Bidder on request. These reports and drawings are not part of the Contract Documents, but the Technical Data contained therein upon whose accuracy Bidder is entitled to rely, as provided in the General Conditions, has been identified and established in the Supplementary Conditions. Bidder is responsible for any interpretation or conclusion Bidder draws from any Technical Data or any other data, interpretations, opinions, or information contained in such reports or shown or indicated in such drawings.
 3. If the Supplementary Conditions do not identify Technical Data, the default definition of Technical Data set forth in Article 1 of the General Conditions will apply.
- B. Underground Facilities: Information and data shown or indicated in the Bidding Documents with respect to existing Underground Facilities at or contiguous to the Site are set forth in the Contract Documents and are based upon information and data furnished to Owner and Engineer by owners of such Underground Facilities, including Owner, or others.
 - C. Adequacy of Data: Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders with respect to subsurface conditions, other physical conditions, and Underground Facilities, and possible changes in the Bidding Documents due to differing or unanticipated subsurface or physical conditions appear in Paragraphs 5.03, 5.04, and 5.05 of the General Conditions. Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders with respect to a Hazardous Environmental Condition at the Site, if any, and possible changes in the Contract Documents due to any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in the Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work, appear in Paragraph 5.06 of the General Conditions.

4.03 *Site Visit and Testing by Bidders*

- A. Bidder shall conduct the required Site visit during normal working hours and shall not disturb any ongoing operations at the Site.
- B. Bidder is not required to conduct any subsurface testing, or exhaustive investigations of Site conditions.
- C. On request, and to the extent Owner has control over the Site, and schedule permitting, the Owner will provide Bidder access to the Site to conduct such additional examinations, investigations, explorations, tests, and studies as Bidder deems necessary for preparing and submitting a successful Bid. Owner will not have any obligation to grant such access if doing so is not practical because of existing operations, security or safety concerns, or restraints on Owner's authority regarding the Site.
- D. Bidder shall comply with all applicable Laws and Regulations regarding excavation and location of utilities, obtain all permits, and comply with all terms and conditions established by Owner or by property owners or other entities controlling the Site with respect to

schedule, access, existing operations, security, liability insurance, and applicable safety programs.

- E. Bidder shall fill all holes, clean up, and restore the Site to its former condition upon completion of such explorations, investigations, tests, and studies.

4.04 *Owner's Safety Program*

- A. Site visits and work at the Site may be governed by an Owner safety program. As the General Conditions indicate, if an Owner safety program exists, it will be noted in the Supplementary Conditions.

4.05 *Other Work at the Site*

- A. Reference is made to Article 8 of the Supplementary Conditions for the identification of the general nature of other work of which Owner is aware (if any) that is to be performed at the Site by Owner or others (such as utilities and other prime contractors) and relates to the Work contemplated by these Bidding Documents. If Owner is party to a written contract for such other work, then on request, Owner will provide to each Bidder access to examine such contracts (other than portions thereof related to price and other confidential matters), if any.

ARTICLE 5 – BIDDER'S REPRESENTATIONS

5.01 It is the responsibility of each Bidder before submitting a Bid to:

- A. examine and carefully study the Bidding Documents, and any data and reference items identified in the Bidding Documents;
- B. visit the Site, conduct a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and satisfy itself as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work;
- C. become familiar with and satisfy itself as to all Laws and Regulations that may affect cost, progress, and performance of the Work;
- D. carefully study all: (1) reports of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings, and (2) reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings;
- E. consider the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and the Site-related reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder; and (3) Bidder's safety precautions and programs;
- F. agree, based on the information and observations referred to in the preceding paragraph, that at the time of submitting its Bid no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of its Bid for performance of the Work at the price bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents;

- G. become aware of the general nature of the work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents;
- H. promptly give Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder discovers in the Bidding Documents and confirm that the written resolution thereof by Engineer is acceptable to Bidder;
- I. determine that the Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance and furnishing of the Work; and
- J. agree that the submission of a Bid will constitute an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article, that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

ARTICLE 6 – PRE-BID CONFERENCE

- 6.01 A non-mandatory pre-bid conference will be held at the time and location stated in the invitation or advertisement to bid. Representatives of Owner and Engineer will be present to discuss the Project. Bidders are encouraged to attend and participate in the conference. The Owner will transmit to all prospective Bidders of record such Addenda as Owner and Engineer considers necessary in response to questions arising at the conference. Oral statements may not be relied upon and will not be binding or legally effective.

ARTICLE 7 – INTERPRETATIONS AND ADDENDA

- 7.01 All questions about the meaning or intent of the Bidding Documents are to be submitted to the Sr. Purchasing Agent, Jonathan Smith in writing to jonsmith@fayetteville-ar.gov. Interpretations or clarifications considered necessary by the Owner and Engineer in response to such questions will be issued by Addenda delivered to all parties recorded as having received the Bidding Documents. Questions received less than four days prior to the date for opening of Bids may not be answered. Only questions answered by Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.
- 7.02 Addenda may be issued to clarify, correct, supplement, or change the Bidding Documents.

ARTICLE 8 – BID SECURITY

- 8.01 A Bid shall be accompanied by Bid security made payable to Owner in an amount not less than 5 percent of Bidder's maximum Bid price (determined by adding the base bid and all alternates) as stated in the Advertisement for Bids and issued by a surety meeting the requirements of Paragraphs 6.01 and 6.02 of the General Conditions.
- 8.02 The Bid security of the apparent Successful Bidder will be retained until Owner awards the contract to such Bidder, and such Bidder has executed the Contract Documents, furnished the required contract security, and met the other conditions of the Notice of Award, whereupon the Bid security will be released. If the Successful Bidder fails to execute and deliver the Contract Documents and furnish the required contract security within 15 days after the Notice of Award, Owner may consider Bidder to be in default, annul the Notice of Award, and the Bid security of that Bidder will be forfeited. Such forfeiture shall be Owner's exclusive remedy if Bidder defaults.
- 8.03 The Bid security of other Bidders that Owner believes to have a reasonable chance of receiving the award may be retained by Owner until the earlier of seven days after the Effective Date of the

Contract or 61 days after the Bid opening, whereupon Bid security furnished by such Bidders will be released.

- 8.04 Bid security of other Bidders that Owner believes do not have a reasonable chance of receiving the award could be released within seven days after the Bid opening.

ARTICLE 9 – CONTRACT TIMES

- 9.01 The number of days within which, or the dates by which, the Work is to be substantially completed and ready for final payment are set forth in the Agreement.

ARTICLE 10 – LIQUIDATED DAMAGES

- 10.01 Provisions for liquidated damages, if any, for failure to timely attain a Milestone, Substantial Completion, or completion of the Work in readiness for final payment, are set forth in the Agreement.

ARTICLE 11 – SUBSTITUTE AND “OR-EQUAL” ITEMS

- 11.01 The Contract for the Work, as awarded, will be on the basis of materials and equipment specified or described in the Bidding Documents with consideration during the bidding and Contract award process of possible substitute or “or-equal” items if such items are approved via Addenda. In cases in which the Contract allows the Contractor to request the Owner or Engineer authorize the use of a substitute or “or-equal” item of material or equipment, application for such acceptance may be made by request as long as request is within ten (10) calendar days prior to bid opening.
- 11.02 All prices that Bidder sets forth in its Bid shall be based on the presumption that the Contractor will furnish the materials and equipment specified or described in the Bidding Documents, as supplemented by Addenda. Any assumptions regarding the possibility of post-Bid approvals of “or-equal” or substitution requests are made at Bidder’s sole risk.

ARTICLE 12 – SUBCONTRACTORS, SUPPLIERS, AND OTHERS

- 12.01 A Bidder shall be prepared to retain specific Subcontractors, Suppliers, or other individuals or entities for the performance of the Work if required by the Bidding Documents (most commonly in the Specifications) to do so. If a prospective Bidder objects to retaining any such Subcontractor, Supplier, or other individual or entity, and the concern is not relieved by an Addendum, then the prospective Bidder should refrain from submitting a Bid.
- 12.02 Subsequent to the submittal of the Bid, Owner may not require the Successful Bidder or Contractor to retain any Subcontractor, Supplier, or other individual or entity against which Contractor has reasonable objection.
- 12.03 Bidders shall submit to Owner a list of Subcontractors proposed for any portion of this work with the submission of bid document. The Owner requires that, such list shall be accompanied by an experience statement with pertinent information regarding similar projects and other evidence of qualification for each such Subcontractor, Supplier, or other individual or entity. If Owner or Engineer, after due investigation, has reasonable objection to any proposed Subcontractor, Supplier, individual, or entity, Owner may, before the Notice of Award is given, request apparent Successful Bidder to submit an acceptable substitute, in which case apparent Successful Bidder shall submit a substitute, Bidder’s Bid price will be increased (or decreased) by the difference in cost occasioned by such substitution, and Owner may consider such price adjustment in evaluating Bids and making the Contract award.

- 12.04 If apparent Successful Bidder declines to make any such substitution, Owner may award the Contract to the next lowest Bidder that proposes to use acceptable Subcontractors, Suppliers, or other individuals or entities. Declining to make requested substitutions could constitute grounds for forfeiture of the Bid security of any Bidder. Any Subcontractor, Supplier, individual, or entity so listed and against which Owner or Engineer makes no written objection prior to the giving of the Notice of Award will be deemed acceptable to Owner and Engineer subject to subsequent revocation of such acceptance as provided in Paragraph 7.06 of the General Conditions.

ARTICLE 13 – PREPARATION OF BID

- 13.01 The Bid Form is included with the Bidding Documents.
- A. All blanks on the Bid Form shall be completed in their entirety and the Bid Form shall be signed and fully executed. Erasures or alterations shall be initialed in ink by the person signing the Bid Form. A Bid price shall be indicated for each section, Bid item, alternate, adjustment unit price item, and unit price item listed therein.
- B. If the Bid Form expressly indicates that submitting pricing on a specific alternate item is optional, and Bidder elects to not furnish pricing for such optional alternate item, then Bidder may enter the words “No Bid” or “Not Applicable.”
- 13.02 A Bid by a corporation shall be executed in the corporate name by a corporate officer (whose title must appear under the signature), accompanied by evidence of authority to sign. The corporate address and state of incorporation shall be shown.
- 13.03 A Bid by a limited liability company shall be executed in the name of the firm by a member or other authorized person and accompanied by evidence of authority to sign. The state of formation of the firm and the official address of the firm shall be shown.
- 13.04 A Bid by an individual shall show the Bidder's name and official address.
- 13.05 All names shall be printed in ink below the signatures.
- 13.06 The Bid shall contain an acknowledgment of receipt of all Addenda, the numbers of which shall be filled in on the Bid Form.
- 13.07 Postal and e-mail addresses and telephone number for communications regarding the Bid shall be shown.
- 13.08 The Bid shall contain evidence of Bidder's authority and qualification to do business in the state where the Project is located, or Bidder shall covenant in writing to obtain such authority and qualification prior to award of the Contract and attach such covenant to the Bid. Bidder's state contractor license number or date of application for licensure, if any, shall also be shown on the Bid Form. Refer to Paragraph 3.01.

ARTICLE 14 – BASIS OF BID

- 14.01 *Unit Price*
- A. Bidders shall submit a Bid on a unit price basis for each item of Work listed in the unit price section of the Bid Form. Deductive alternates shall be bid in their entirety by all bidders. Failure to bid deductive alternates provided could result in rejection of bid.

ARTICLE 15 – SUBMITTAL OF BID

- 15.01 The Bid Form is to be completed and submitted with the Bid security and the other documents required to be submitted under the terms of Article 7 of the Bid Form.
- 15.02 A Bid shall be received no later than the date and time prescribed and at the place indicated in the advertisement or invitation to bid and shall be enclosed in a plainly marked package with the Project title (and, if applicable, the designated portion of the Project for which the Bid is submitted), the name and address of Bidder, and shall be accompanied by the Bid security and other required documents. If a Bid is sent by mail or delivered in person by appointment, the sealed envelope containing the Bid shall be enclosed in a separate package plainly marked on the outside with the bid number and project name
- 15.03 Bids received after the date and time prescribed for the opening of bids, or not submitted at the correct location or in the designated manner, will not be accepted.

ARTICLE 16 – MODIFICATION AND WITHDRAWAL OF BID

- 16.01 A Bid may be withdrawn by an appropriate document duly executed in the same manner that a Bid must be executed and delivered to the place where Bids are to be submitted prior to the date and time for the opening of Bids. Upon receipt of such notice, the unopened Bid will be returned to the Bidder.
- 16.02 If a Bidder wishes to modify its Bid prior to Bid opening, Bidder must withdraw its initial Bid in the manner specified in Paragraph 16.01 and submit a new Bid prior to the date and time for the opening of Bids.
- 16.03 If within 24 hours after Bids are opened any Bidder files a duly signed written notice with Owner and promptly thereafter demonstrates to the reasonable satisfaction of Owner that there was a material and substantial mistake in the preparation of its Bid, that Bidder may withdraw its Bid, and the Bid security may be returned.

ARTICLE 17 – OPENING OF BIDS

- 17.01 Bids will be opened at the time and place indicated in the advertisement or invitation to bid and, unless obviously non-responsive, read aloud publicly. The bid opening will be viewable immediately following the deadline via livestream on the City of Fayetteville's YouTube Channel at <https://www.youtube.com/user/cityoffayettevillear>. An abstract of the amounts of the base Bids and major alternates, if any, will be made available to Bidders after the opening of Bids.

ARTICLE 18 – BIDS TO REMAIN SUBJECT TO ACCEPTANCE

- 18.01 All Bids will remain subject to acceptance for the period of time stated in the Bid Form, but Owner may, in its sole discretion, release any Bid and return the Bid security prior to the end of this period.

ARTICLE 19 – EVALUATION OF BIDS AND AWARD OF CONTRACT

- 19.01 Owner reserves the right to reject any or all Bids, including without limitation, nonconforming, nonresponsive, unbalanced, or conditional Bids. Owner may reject the Bid of any Bidder that Owner finds, after reasonable inquiry and evaluation, to not be responsible. If Bidder purports to add terms or conditions to its Bid, takes exception to any provision of the Bidding Documents, or

attempts to alter the contents of the Contract Documents for purposes of the Bid, then the Owner may reject the Bid as nonresponsive; provided that Owner also reserves the right to waive all minor informalities not involving price, time, or changes in the Work.

19.02 If Owner awards the contract for the Work, such award shall be to the responsible Bidder submitting the lowest responsive Bid.

19.03 Evaluation of Bids

A. In evaluating Bids, Owner will consider whether or not the Bids comply with the prescribed requirements, and such alternates, unit prices, and other data, as may be requested in the Bid Form or prior to the Notice of Award.

19.04 In evaluating whether a Bidder is responsible, Owner will consider the qualifications of the Bidder and may consider the qualifications and experience of Subcontractors and Suppliers proposed for those portions of the Work for which the identity of Subcontractors and Suppliers must be submitted as provided in the Bidding Documents.

19.05 Owner may conduct such investigations as Owner deems necessary to establish the responsibility, qualifications, and financial ability of Bidders and any proposed Subcontractors or Suppliers.

19.06 Certification of Funds

- A. BIDDERS ARE REQUIRED TO PROVIDE PRICING FOR ALL LINE ITEMS. FAILURE TO PROVIDE DEDUCTIVE ALTERNATE PRICING CAN RESULT IN BID REJECTION.
- B. THE CITY INTENDS TO AWARD THIS CONTRACT TO THE LOWEST QUALIFIED RESPONSIBLE RESPONSIBLE BIDDER BASED ON THE LUMP SUM BID AS LONG AS SUCH BID FALLS WITHIN THE AMOUNT OF FUNDS CERTIFIED FOR THE PROJECT, PLUS 25%.
- C. IN THE EVENT NO BID FALLS WITHIN THE AMOUNT OF FUNDS CERTIFIED FOR THE PROJECT, PLUS 25%, THE CITY WILL UTILIZE THE DEDUCTIVE ALTERNATES IN ORDER UNTIL BIDS CAN BE COMPARED WITHIN THE AMOUNT CERTIFIED, PLUS 25%.
- D. IN THE EVENT ALL DEDUCTIVE ALTERNATES ARE SUBTRACTED AND NO BID FALLS WITHIN THE AMOUNT CERTIFIED, PLUS 25%, ALL BIDS WILL BE REJECTED.
- E. The City shall have the authority to negotiate an award with the apparent responsive responsible low bidder but only if the low bid is within twenty-five percent (25%) of the certification of funds.

ARTICLE 20 – BONDS AND INSURANCE

20.01 Article 6 of the General Conditions, as may be modified by the Supplementary Conditions, sets forth Owner's requirements as to performance and payment bonds and insurance. When the Successful Bidder delivers the Agreement (executed by Successful Bidder) to Owner, it shall be accompanied by required bonds and insurance documentation.

ARTICLE 21 – SIGNING OF AGREEMENT

21.01 When Owner issues a Notice of Award to the Successful Bidder, it shall be accompanied by the unexecuted counterparts of the Agreement along with the other Contract Documents as identified in the Agreement. Within 15 days thereafter, Successful Bidder shall execute and deliver the required number of counterparts of the Agreement (and any bonds and insurance documentation required to be delivered by the Contract Documents) to Owner. Within ten days thereafter, Owner shall deliver one fully executed counterpart of the Agreement to Successful Bidder, together with printed and electronic copies of the Contract Documents as stated in Paragraph 2.02 of the General Conditions.

ARTICLE 22 – PREVAILING WAGE RATES

22.01 The applicability of Prevailing Wage Rates and Davis-Bacon and Related Acts are discussed in the Supplementary Conditions and included with these bid documents as Appendix B – Davis-Bacon Determination No. 20200002 as of 01/01/2020 .

ARTICLE 23 – CONTRACTS TO BE ASSIGNED – N/A

ARTICLE 24 – RETAINAGE

24.01 Provisions concerning Contractor's rights to deposit securities in lieu of retainage are set forth in the Agreement.

24.02 Retainage shall be 5% of the earned progress payments per Arkansas Code 22-9-604.

Contract - Bid 21-50
Tanglewood Branch Restoration
Appendix A - City Bid Package

BID FORM

Tanglewood Branch Channel Restoration and Aquatic Habitat Improvement Project
Fayetteville, Arkansas 2021

TABLE OF CONTENTS

	Page
Article 1 – Bid Recipient	1
Article 2 – Bidder’s Acknowledgements	1
Article 3 – Bidder’s Representations.....	1
Article 4 – Bidder’s Certification	2
Article 5 – Basis of Bid.....	3
Article 6 – Time of Completion	4
Article 7 – Attachments to this Bid	4
Article 8 – Defined Terms.....	5
Article 9 – Bid Submittal.....	6

Contract - Bid 21-50
Tanglewood Branch Restoration
Appendix A - City Bid Package

ARTICLE 1 – BID RECIPIENT

1.01 This Bid is submitted to:

The City of Fayetteville, AR

Purchasing Division – Suite 306

113 W. Mountain St

Fayetteville, AR 72702

1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

ARTICLE 2 – BIDDER’S ACKNOWLEDGEMENTS

2.01 Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for 60 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

ARTICLE 3 – BIDDER’S REPRESENTATIONS

3.01 In submitting this Bid, Bidder represents that:

- A. Bidder has examined and carefully studied the Bidding Documents, and any data and reference items identified in the Bidding Documents, and hereby acknowledges receipt of the following Addenda:

Addendum No.

Addendum, Date

_____	_____
_____	_____
_____	_____

- B. Bidder has visited the Site, conducted a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and satisfied itself as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
- C. Bidder is familiar with and has satisfied itself as to all Laws and Regulations that may affect cost, progress, and performance of the Work, including federal requirements.
- D. Bidder has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings, and (2) reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings.

- E. Bidder has considered the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and any Site-related reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder; and (3) Bidder's safety precautions and programs.
- F. Bidder agrees, based on the information and observations referred to in the preceding paragraph, that no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the price bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents.
- G. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.
- H. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents and confirms that the written resolution thereof by Engineer is acceptable to Bidder.
- I. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance and furnishing of the Work.
- J. The submission of this Bid constitutes an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article, and that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

ARTICLE 4 – BIDDER'S CERTIFICATION

4.01 Bidder certifies that:

- A. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation;
- B. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid;
- C. Bidder has not solicited or induced any individual or entity to refrain from bidding; and
- D. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 4.01.D:
 - 1. "corrupt practice" means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process;
 - 2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
 - 3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels; and

4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.
5. Debarment and Suspension: This contract is a covered transaction for purposes of 2 C.F.R. pt. 180 and 2 C.F.R. pt. 3000. As such the contractor is required to verify that none of the contractor, its principals (defined at 2 C.F.R. § 180.995), or its affiliates (defined at 2 C.F.R. § 180.905) are excluded (defined at 2 C.F.R. § 180.940) or disqualified (defined at 2 C.F.R. § 180.935).
 - A contract award (per [2 CFR 180.220](#)) shall not be made to parties listed on the governmentwide exclusions in the System for Award Management (SAM), in accordance with the OMB guidelines at [2 CFR 180](#) that implement Executive Orders 12549 (3 CFR part 1986 Comp., p. 189) and 12689 (3 CFR part 1989 Comp., p. 235), "Debarment and Suspension." SAM Exclusions contains the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549.
 - The contractor must comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C and must include a requirement to comply with these regulations in any lower tier covered transaction it enters into.
 - If it is later determined that the contractor did not comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, in addition to remedies available to (name of state agency serving as recipient and name of subrecipient), the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment.
 - The bidder or proposer agrees to comply with the requirements of 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C while this offer is valid and throughout the period of any contract that may arise from this offer. The bidder or proposer further agrees to include a provision requiring such compliance in its lower tier covered transactions.
6. Bidder understands funding for this project shall require full compliance with the Code of Federal Regulations (CFR) Part 200, Appendix II titled Contract Provisions for Non-Federal Entity Contracts Under Federal Awards.

ARTICLE 5 – BASIS OF BID

5.01 Bidder will complete the Work in accordance with the Contract Documents for the following price(s):

Refer to the City's electronic bidding platform to submit bid pricing electronically.

Contact the City Purchasing Division to submit a physical sealed bid.

Contract - Bid 21-50
Tanglewood Branch Restoration
Appendix A - City Bid Package

5.02 Bidder acknowledges that (1) each Bid Unit Price includes an amount considered by Bidder to be adequate to cover Contractor's overhead and profit for each separately identified item, and (2) estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all unit price Bid items will be based on actual quantities, determined as provided in the Contract Documents.

ARTICLE 6 – TIME OF COMPLETION

6.01 Bidder agrees that the Work will be substantially complete within 60 calendar days after the date when the Contract Times commence to run as provided in Paragraph 4.01 of the General Conditions, and will be completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions within 75 calendar days after the date when the Contract Times commence to run.

6.02 Bidder accepts the provisions of the Agreement as to liquidated damages.

ARTICLE 7 – ATTACHMENTS TO THIS BID

7.01 The following documents are submitted with and made a condition of this Bid:

- A. Required Bid security;
- B. List of Proposed Subcontractors and qualifications;
- C. List of Proposed Suppliers (N/A);
- D. List of Project References;
- E. Evidence of authority to do business in the state of the Project; or a written covenant to obtain such license within the time for acceptance of Bids;
- F. Contractor's License No. OR date of application for licensure: [REDACTED]
- G. Required Bidder Qualification Statement with supporting data;
- H. Byrd Anti-Lobbying Amendment Certification (completed and executed on the enclosed form); and
- I. *Any other documents indicated as pertinent*

ARTICLE 8 – DEFINED TERMS

8.01 The terms used in this Bid with initial capital letters have the meanings stated in the Instructions to Bidders, the General Conditions, and the Supplementary Conditions.

ARTICLE 9 – BID SUBMITTAL

BIDDER: *[Indicate correct name of bidding entity]*

By:

[Signature] _____

[Printed name] _____

(If Bidder is a corporation, a limited liability company, a partnership, or a joint venture, attach evidence of authority to sign.)

Attest:

[Signature] _____

[Printed name] _____

Title: _____

Submittal Date: _____

Address for giving notices:

TAX ID / EIN Number: _____

Telephone Number: _____

Fax Number: _____

Contact Name and e-mail address: _____

Bidder's Contractor's License No. OR date of application for licensure: _____

City of Fayetteville, AR
Bid 21-50, Construction – Tanglewood Branch Restoration
Byrd Anti-Lobbying Amendment Certification
44 C.F.R. PART 18 – CERTIFICATION REGARDING LOBBYING

ALL BIDDERS SHALL SUBMIT THIS FORM WITH BID

The undersigned certifies, to the best of his or her knowledge and belief, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
3. The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

The Contractor hereby certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. Chap. 38, Administrative Remedies for False Claims and Statements, apply to this certification and disclosure, if any.

Name of Contractor

Signature of Authorized Official

Name and Title of Contractor's Authorized Official

Date

NOTICE OF AWARD

Date of Issuance:

Owner: City of Fayetteville, AR

Owner's Contract No.:

Engineer: Watershed Conservation Resource Center

Engineer's Project No.: WCRC-21-01

Project: Tanglewood Branch Channel Restoration and Aquatic Habitat Improvement Project

Contract Name: Tanglewood Branch Channel Restoration and Aquatic Habitat Improvement Project

Bidder:

Bidder's Address:

TO BIDDER:

You are notified that Owner has accepted your Bid dated [] for the above Contract, and that you are the Successful Bidder and are awarded a Contract for: restoration of approximately 1,200 ft of Tanglewood Branch and its un-named tributary to the Southeast to reduce streambank erosion and improve aquatic/terrestrial habitat. Work includes building stacked rock walls, reinforcing existing historic walls, removing construction debris and a debris jam, installing boulder riffle grade control structures, and creating step pools.

The Contract Price of the awarded Contract is: \$ [] and is subject to unit prices.

☐ unexecuted counterparts of the Agreement accompany this Notice of Award, and one copy of the Contract Documents accompanies this Notice of Award, or has been transmitted or made available to Bidder electronically.

☐ a set of the Drawings will be delivered separately from the other Contract Documents.

You must comply with the following conditions precedent within 10 days of the date of receipt of this Notice of Award:

1. Deliver to Owner [2] counterparts of the Agreement, fully executed by Bidder.
2. Deliver with the executed Agreement(s) the Contract security *[e.g., performance and payment bonds]* and insurance documentation as specified in the Instructions to Bidders and General Conditions, Articles 2 and 6.
3. Other conditions precedent (if any):

Failure to comply with these conditions within the time specified will entitle Owner to consider you in default, annul this Notice of Award, and declare your Bid security forfeited.

Within ten days after you comply with the above conditions, Owner will return to you one fully executed counterpart of the Agreement, together with any additional copies of the Contract Documents as indicated in Paragraph 2.02 of the General Conditions.

Owner: City of Fayetteville

Authorized Signature

By:

Title:

**AGREEMENT
BETWEEN OWNER AND CONTRACTOR
FOR CONSTRUCTION CONTRACT (STIPULATED PRICE)**

Completion of Form NOT required at time of bid

THIS AGREEMENT is by and between City of Fayetteville ("Owner") and _____ ("Contractor").

Owner and Contractor hereby agree as follows:

ARTICLE 1 – WORK

1.01 Contractor shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows:

RESTORATION OF APPROXIMATELY 1200 FT SECTION OF TANGLEWOOD BRANCH AND ITS UNNAMED TRIBUTARY TO THE SOUTHEAST THAT WILL REDUCE STREAMBANK EROSION AND IMPROVE AQUATIC AND TERRESTRIAL HABITAT.

ARTICLE 2 – THE PROJECT

2.01 The Project, of which the Work under the Contract Documents is a part, is generally described as follows: Work includes building stacked rock walls, reinforcing existing historic walls, removing construction debris and a debris jam, installing boulder riffle grade control structures, and creating step pools.

ARTICLE 3 – ENGINEER

3.01 The Project has been designed by Watershed Conservation Resource Center.

3.02 The Owner has retained Watershed Conservation Resource Center ("Engineer") to act as Owner's representative, assume all duties and responsibilities, and have the rights and authority assigned to Engineer in the Contract Documents in connection with the completion of the Work in accordance with the Contract Documents.

ARTICLE 4 – CONTRACT TIMES

4.01 Time of the Essence

A. All time limits for Milestones, if any, Substantial Completion, and completion and readiness for final payment as stated in the Contract Documents are of the essence of the Contract.

4.02 Contract Times: Days

A. The Work will be substantially completed within 60 days after the date when the Contract Times commence to run as provided in Paragraph 4.01 of the General Conditions, and completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions within 75 days after the date when the Contract Times commence to run.

4.03 Liquidated Damages

- A. Contractor and Owner recognize that time is of the essence as stated in Paragraph 4.01 above and that Owner will suffer financial and other losses if the Work is not completed and Milestones not achieved within the times specified in Paragraph 4.02 above, plus any extensions thereof allowed in accordance with the Contract. The parties also recognize the delays, expense, and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by Owner if the Work is not completed on time. Accordingly, instead of requiring any such proof, Owner and Contractor agree that as liquidated damages for delay (but not as a penalty):
1. Substantial Completion: Contractor shall pay Owner \$ 250 for each day that expires after the time (as duly adjusted pursuant to the Contract) specified in Paragraph 3.02.A above for Substantial Completion until the Work is substantially complete.

ARTICLE 5 – CONTRACT PRICE

- 5.01 Owner shall pay Contractor for completion of the Work in accordance with the Contract Documents the amounts that follow, subject to adjustment under the Contract:
- A. For all Unit Price Work, an amount equal to the sum of the extended prices (established for each separately identified item of Unit Price Work by multiplying the unit price times the actual quantity of that item):

Unit Price Work					
Item No.	Description	Unit	Estimated Quantity	Unit Price	Extended Price
Total of all Extended Prices for Unit Price Work (subject to final adjustment based on actual quantities)					\$

The extended prices for Unit Price Work set forth as of the Effective Date of the Contract are based on estimated quantities. As provided in Paragraph 13.03 of the General Conditions, estimated quantities are not guaranteed, and determinations of actual quantities and classifications are to be made by Engineer.

ARTICLE 6 – PAYMENT PROCEDURES

6.01 Submittal and Processing of Payments

- A. Contractor shall submit Applications for Payment in accordance with Article 15 of the General Conditions. Applications for Payment will be processed by Engineer as provided in the General Conditions.

6.02 Progress Payments; Retainage

- A. Owner shall make progress payments on account of the Contract Price on the basis of Contractor's Applications for Payment on or about the 15th day of each month during performance of the Work as provided in Paragraph 6.02.A.1 below, provided that such Applications for Payment have been submitted in a timely manner and otherwise meet the requirements of the Contract. All such payments will be measured by the Schedule of Values established as provided in the General Conditions (and in the case of Unit Price Work based on the number of units completed) or, in the event there is no Schedule of Values, as provided elsewhere in the Contract.
1. Prior to Substantial Completion, progress payments will be made in an amount equal to the percentage indicated below but, in each case, less the aggregate of payments previously made and less such amounts as Owner may withhold, including but not limited to liquidated damages, in accordance with the Contract
- a. 95 percent of Work completed (with the balance being retainage); and
 - b. 100 percent of cost of materials and equipment not incorporated in the Work (with the balance being retainage).
 - c. Retainage shall be 5% of the earned progress payments per Arkansas Code 22-9-604.
- B. Upon Substantial Completion, Owner shall pay an amount sufficient to increase total payments to Contractor to 95 percent of the Work completed, less such amounts set off by Owner pursuant to Paragraph 15.01.E of the General Conditions, and less 100 percent of Engineer's estimate of the value of Work to be completed or corrected as shown on the punch list of items to be completed or corrected prior to final payment.

6.03 Final Payment

- A. Upon final completion and acceptance of the Work in accordance with Paragraph 15.06 of the General Conditions, Owner shall pay the remainder of the Contract Price as recommended by Engineer as provided in said Paragraph 15.06.

ARTICLE 7 – INTEREST

7.01 All amounts not paid when due shall bear interest at the rate of 0 percent per annum.

ARTICLE 8 – CONTRACTOR'S REPRESENTATIONS

- 8.01 In order to induce Owner to enter into this Contract, Contractor makes the following representations:
- A. Contractor has examined and carefully studied the Contract Documents, and any data and reference items identified in the Contract Documents.
 - B. Contractor has visited the Site, conducted a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
 - C. Contractor is familiar with and is satisfied as to all Laws and Regulations that may affect cost, progress, and performance of the Work.
 - D. Contractor has considered the information known to Contractor itself; information commonly known to contractors doing business in the locality of the Site; information and

observations obtained from visits to the Site; the Contract Documents; and the Site-related reports and drawings identified in the Contract Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor; and (3) Contractor's safety precautions and programs.

- E. Based on the information and observations referred to in the preceding paragraph, Contractor agrees that no further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract.
- F. Contractor is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Contract Documents.
- G. Contractor has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.
- H. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.
- I. Contractor's entry into this Contract constitutes an incontrovertible representation by Contractor that without exception all prices in the Agreement are premised upon performing and furnishing the Work required by the Contract Documents.

ARTICLE 9 – CONTRACT DOCUMENTS

9.01 Contents

- A. The Contract Documents consist of the following:
 - 1. This Agreement (Current Section, inclusive).
 - 2. Performance bond (Section: Performance Bond, inclusive).
 - 3. Payment bond (Section: Payment Bond, inclusive).
 - 4. Other bonds.
 - a. Maintenance and Warranty Bond (to be provided following Substantial Completion) (If required).
 - 5. General Conditions (Section: General Conditions, inclusive).
 - 6. Supplementary Conditions (Section: Supplementary Conditions, inclusive).
 - 7. Specifications as listed in the table of contents of the Project Manual.
 - 8. Drawings (not attached but incorporated by reference) consisting of 25 sheets with each sheet bearing the following general title: Tanglewood Branch Stream Enhancement
 - 9. Addenda (numbers to , inclusive).
 - 10. Exhibits to this Agreement (enumerated as follows):
 - a. Contractor's Bid (pages to , inclusive).

11. The following which may be delivered or issued on or after the Effective Date of the Contract and are not attached hereto:
 - a. Notice to Proceed.
 - b. Work Change Directives.
 - c. Change Orders.
 - d. Field Orders.
- B. The documents listed in Paragraph 9.01.A are attached to this Agreement (except as expressly noted otherwise above).
- C. There are no Contract Documents other than those listed above in this Article 9.
- D. The Contract Documents may only be amended, modified, or supplemented as provided in the General Conditions.

ARTICLE 10 – MISCELLANEOUS

10.01 Terms

- A. Terms used in this Agreement will have the meanings stated in the General Conditions and the Supplementary Conditions.

10.02 Assignment of Contract

- A. Unless expressly agreed to elsewhere in the Contract, no assignment by a party hereto of any rights under or interests in the Contract will be binding on another party hereto without the written consent of the party sought to be bound; and, specifically but without limitation, money that may become due and money that is due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.

10.03 Successors and Assigns

- A. Owner and Contractor each binds itself, its successors, assigns, and legal representatives to the other party hereto, its successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

10.04 Severability

- A. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon Owner and Contractor, who agree that the Contract Documents shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

10.05 Contractor's Certifications

- A. Contractor certifies that it has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for or in executing the Contract. For the purposes of this Paragraph 10.05:

1. "corrupt practice" means the offering, giving, receiving, or soliciting of any thing of value likely to influence the action of a public official in the bidding process or in the Contract execution;
2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process or the execution of the Contract to the detriment of Owner, (b) to establish Bid or Contract prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish Bid prices at artificial, non-competitive levels; and
4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

10.06 Other Provisions

- A. Owner stipulates that if the General Conditions that are made a part of this Contract are based on EJCDC® C-700, Standard General Conditions for the Construction Contract, published by the Engineers Joint Contract Documents Committee®, and if Owner is the party that has furnished said General Conditions, then Owner has plainly shown all modifications to the standard wording of such published document to the Contractor, through a process such as highlighting or "track changes" (redline/strikeout), or in the Supplementary Conditions.

IN WITNESS WHEREOF, Owner and Contractor have signed this Agreement.

This Agreement will be effective on _____ (which is the Effective Date of the Contract).

OWNER:

CONTRACTOR:

City of Fayetteville

By: _____

By: _____

Title: _____

Title: _____

(If Contractor is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.)

Attest: _____

Attest: _____

Title: _____

Title: _____

Address for giving notices:

Address for giving notices:

113 W Mountain St

Fayetteville, Arkansas 72702

License No.:

(where applicable)

(If Owner is a corporation, attach evidence of authority to sign. If Owner is a public body, attach evidence of authority to sign and resolution or other documents authorizing execution of this Agreement.)

NOTE TO USER: Use in those states or other jurisdictions where applicable or required.

Contract - Bid 21-50
Tanglewood Branch Restoration
Appendix A - City Bid Package

NOTICE TO PROCEED

Owner: City of Fayetteville, AR

Owner's Contract No.:

Contractor:

Contractor's Project No.:

Engineer: Watershed Conservation
Resource Center

Engineer's Project No.: WCRC-21-01

Project: Tanglewood Branch Channel
Restoration and Aquatic Habitat
Improvement Project

Contract Name:

Effective Date of Contract:

TO CONTRACTOR:

Owner hereby notifies Contractor that the Contract Times under the above Contract will commence to run on [_____, 20__]. *[see Paragraph 4.01 of the General Conditions]*

On that date, Contractor shall start performing its obligations under the Contract Documents. No Work shall be done at the Site prior to such date. In accordance with the Agreement, [the date of Substantial Completion is _____, and the date of readiness for final payment is _____] **or** [the number of days to achieve Substantial Completion is _____, and the number of days to achieve readiness for final payment is _____].

Before starting any Work at the Site, Contractor must comply with the following:

[Note any access limitations, security procedures, or other restrictions]

Owner: **City of Fayetteville, AR**

Authorized Signature

By:

Title:

Date Issued:

Copy: Engineer

PERFORMANCE BOND

CONTRACTOR *(name and address):*

SURETY *(name and address of principal place of business):*

OWNER *(name and address):*

City of Fayetteville, AR

113 W. Mountain St, Fayetteville, AR 72702

CONSTRUCTION CONTRACT

Effective Date of the Agreement:

Amount:

Description *(name and location):*

BOND

Bond Number:

Date *(not earlier than the Effective Date of the Agreement of the Construction Contract):*

Amount:

Modifications to this Bond Form: ☐ None ☒ See Paragraph 16

Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth below, do each cause this Performance Bond to be duly executed by an authorized officer, agent, or representative.

CONTRACTOR AS PRINCIPAL

SURETY

Contractor's Name and Corporate Seal (seal)

Surety's Name and Corporate Seal (seal)

By: _____
Signature

By: _____
Signature *(attach power of attorney)*

Print Name

Print Name

Title

Title

Attest: _____
Signature

Attest: _____
Signature

Title

Title

Notes: (1) Provide supplemental execution by any additional parties, such as joint venturers. (2) Any singular reference to Contractor, Surety, Owner, or other party shall be considered plural where applicable.

1. The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner for the performance of the Construction Contract, which is incorporated herein by reference.

2. If the Contractor performs the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond, except when applicable to participate in a conference as provided in Paragraph 3.

3. If there is no Owner Default under the Construction Contract, the Surety's obligation under this Bond shall arise after:

3.1 The Owner first provides notice to the Contractor and the Surety that the Owner is considering declaring a Contractor Default. Such notice shall indicate whether the Owner is requesting a conference among the Owner, Contractor, and Surety to discuss the Contractor's performance. If the Owner does not request a conference, the Surety may, within five (5) business days after receipt of the Owner's notice, request such a conference. If the Surety timely requests a conference, the Owner shall attend. Unless the Owner agrees otherwise, any conference requested under this Paragraph 3.1 shall be held within ten (10) business days of the Surety's receipt of the Owner's notice. If the Owner, the Contractor, and the Surety agree, the Contractor shall be allowed a reasonable time to perform the Construction Contract, but such an agreement shall not waive the Owner's right, if any, subsequently to declare a Contractor Default;

3.2 The Owner declares a Contractor Default, terminates the Construction Contract and notifies the Surety; and

3.3 The Owner has agreed to pay the Balance of the Contract Price in accordance with the terms of the Construction Contract to the Surety or to a contractor selected to perform the Construction Contract.

4. Failure on the part of the Owner to comply with the notice requirement in Paragraph 3.1 shall not constitute a failure to comply with a condition precedent to the Surety's obligations, or release the Surety from its obligations, except to the extent the Surety demonstrates actual prejudice.

5. When the Owner has satisfied the conditions of Paragraph 3, the Surety shall promptly and at the Surety's expense take one of the following actions:

5.1 Arrange for the Contractor, with the consent of the Owner, to perform and complete the Construction Contract;

5.2 Undertake to perform and complete the Construction Contract itself, through its agents or independent contractors;

5.3 Obtain bids or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract, arrange for a contract to be prepared for execution by the Owner and a contractor selected with the Owners concurrence,

to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Paragraph 7 in excess of the Balance of the Contract Price incurred by the Owner as a result of the Contractor Default; or

5.4 Waive its right to perform and complete, arrange for completion, or obtain a new contractor, and with reasonable promptness under the circumstances:

5.4.1 After investigation, determine the amount for which it may be liable to the Owner and, as soon as practicable after the amount is determined, make payment to the Owner; or

5.4.2 Deny liability in whole or in part and notify the Owner, citing the reasons for denial.

6. If the Surety does not proceed as provided in Paragraph 5 with reasonable promptness, the Surety shall be deemed to be in default on this Bond seven days after receipt of an additional written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Paragraph 5.4, and the Owner refuses the payment or the Surety has denied liability, in whole or in part, without further notice the Owner shall be entitled to enforce any remedy available to the Owner.

7. If the Surety elects to act under Paragraph 5.1, 5.2, or 5.3, then the responsibilities of the Surety to the Owner shall not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the Surety shall not be greater than those of the Owner under the Construction Contract. Subject to the commitment by the Owner to pay the Balance of the Contract Price, the Surety is obligated, without duplication for:

7.1 the responsibilities of the Contractor for correction of defective work and completion of the Construction Contract;

7.2 additional legal, design professional, and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under Paragraph 5; and

7.3 liquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Contractor.

8. If the Surety elects to act under Paragraph 5.1, 5.3, or 5.4, the Surety's liability is limited to the amount of this Bond.

9. The Surety shall not be liable to the Owner or others for obligations of the Contractor that are unrelated to the Construction Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than the Owner or its heirs, executors, administrators, successors, and assigns.

10. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders, and other obligations.

11. Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the work or part of the work is located and shall be instituted within two years after a declaration of Contractor Default or within two years after the Contractor ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this paragraph are void or prohibited by law, the minimum periods of limitations available to sureties as a defense in the jurisdiction of the suit shall be applicable.

12. Notice to the Surety, the Owner, or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears.

13. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

14. Definitions

14.1 Balance of the Contract Price: The total amount payable by the Owner to the Contractor under the Construction Contract after all proper adjustments have been made including allowance for the Contractor for any amounts received or to be received by the Owner in settlement of insurance or other claims

for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Construction Contract.

14.2 Construction Contract: The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and changes made to the agreement and the Contract Documents.

14.3 Contractor Default: Failure of the Contractor, which has not been remedied or waived, to perform or otherwise to comply with a material term of the Construction Contract.

14.4 Owner Default: Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.

14.5 Contract Documents: All the documents that comprise the agreement between the Owner and Contractor.

15. If this Bond is issued for an agreement between a contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

16. Modifications to this Bond are as follows:

Contract - Bid 2150
Tanglewood Branch Restoration
Appendix A - City Bid Package

PAYMENT BOND

CONTRACTOR *(name and address)*:

SURETY *(name and address of principal place of business)*:

OWNER:

City of Fayetteville, AR
113 W Mountain St
Fayetteville, AR 72702

CONSTRUCTION CONTRACT

Effective Date of the Agreement:

Amount:

Description *(name and location)*:

BOND

Bond Number:

Date *(not earlier than the Effective Date of the Agreement of the Construction Contract)*:

Amount:

Modifications to this Bond Form: ☐ None ☒ See Paragraph 18

Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth below, do each cause this Payment Bond to be duly executed by an authorized officer, agent, or representative.

CONTRACTOR AS PRINCIPAL

SURETY

Contractor's Name and Corporate Seal

Surety's Name and Corporate Seal

By: _____
Signature

By: _____
Signature *(attach power of attorney)*

Print Name

Print Name

Title

Title

Attest: _____
Signature

Attest: _____
Signature

Title

Title

Notes: (1) Provide supplemental execution by any additional parties, such as joint venturers. (2) Any singular reference to Contractor, Surety, Owner, or other party shall be considered plural where applicable.

1. The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner to pay for labor, materials, and equipment furnished for use in the performance of the Construction Contract, which is incorporated herein by reference, subject to the following terms.
2. If the Contractor promptly makes payment of all sums due to Claimants, and defends, indemnifies, and holds harmless the Owner from claims, demands, liens, or suits by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, then the Surety and the Contractor shall have no obligation under this Bond.
3. If there is no Owner Default under the Construction Contract, the Surety's obligation to the Owner under this Bond shall arise after the Owner has promptly notified the Contractor and the Surety (at the address described in Paragraph 13) of claims, demands, liens, or suits against the Owner or the Owner's property by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, and tendered defense of such claims, demands, liens, or suits to the Contractor and the Surety.
4. When the Owner has satisfied the conditions in Paragraph 3, the Surety shall promptly and at the Surety's expense defend, indemnify, and hold harmless the Owner against a duly tendered claim, demand, lien, or suit.
5. The Surety's obligations to a Claimant under this Bond shall arise after the following:
 - 5.1 Claimants who do not have a direct contract with the Contractor,
 - 5.1.1 have furnished a written notice of non-payment to the Contractor, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were or equipment was, furnished or supplied or for whom the labor was done or performed, within ninety (90) days after having last performed labor or last furnished materials or equipment included in the Claim; and
 - 5.1.2 have sent a Claim to the Surety (at the address described in Paragraph 13).
 - 5.2 Claimants who are employed by or have a direct contract with the Contractor have sent a Claim to the Surety (at the address described in Paragraph 13).
6. If a notice of non-payment required by Paragraph 5.1.1 is given by the Owner to the Contractor, that is sufficient to satisfy a Claimant's obligation to furnish a written notice of non-payment under Paragraph 5.1.1.
7. When a Claimant has satisfied the conditions of Paragraph 5.1 or 5.2, whichever is applicable, the Surety shall promptly and at the Surety's expense take the following actions:
 - 7.1 Send an answer to the Claimant, with a copy to the Owner, within sixty (60) days after receipt of the Claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed; and
 - 7.2 Pay or arrange for payment of any undisputed amounts.
 - 7.3 The Surety's failure to discharge its obligations under Paragraph 7.1 or 7.2 shall not be deemed to constitute a waiver of defenses the Surety or Contractor may have or acquire as to a Claim, except as to undisputed amounts for which the Surety and Claimant have reached agreement. If, however, the Surety fails to discharge its obligations under Paragraph 7.1 or 7.2, the Surety shall indemnify the Claimant for the reasonable attorney's fees the Claimant incurs thereafter to recover any sums found to be due and owing to the Claimant.
8. The Surety's total obligation shall not exceed the amount of this Bond, plus the amount of reasonable attorney's fees provided under Paragraph 7.3, and the amount of this Bond shall be credited for any payments made in good faith by the Surety.
9. Amounts owed by the Owner to the Contractor under the Construction Contract shall be used for the performance of the Construction Contract and to satisfy claims, if any, under any construction performance bond. By the Contractor furnishing and the Owner accepting this Bond, they agree that all funds earned by the Contractor in the performance of the Construction Contract are dedicated to satisfy obligations of the Contractor and Surety under this Bond, subject to the Owner's priority to use the funds for the completion of the work.
10. The Surety shall not be liable to the Owner, Claimants, or others for obligations of the Contractor that are unrelated to the Construction Contract. The Owner shall not be liable for the payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligation to make payments to or give notice on behalf of Claimants, or otherwise have any obligations to Claimants under this Bond.
11. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders, and other obligations.

12. No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the state in which the project that is the subject of the Construction Contract is located or after the expiration of one year from the date (1) on which the Claimant sent a Claim to the Surety pursuant to Paragraph 5.1.2 or 5.2, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

13. Notice and Claims to the Surety, the Owner, or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears. Actual receipt of notice or Claims, however accomplished, shall be sufficient compliance as of the date received.

14. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

15. Upon requests by any person or entity appearing to be a potential beneficiary of this Bond, the Contractor and Owner shall promptly furnish a copy of this Bond or shall permit a copy to be made.

16. Definitions

16.1 **Claim:** A written statement by the Claimant including at a minimum:

1. The name of the Claimant;
2. The name of the person for whom the labor was done, or materials or equipment furnished;
3. A copy of the agreement or purchase order pursuant to which labor, materials, or equipment was furnished for use in the performance of the Construction Contract;
4. A brief description of the labor, materials, or equipment furnished;
5. The date on which the Claimant last performed labor or last furnished materials or equipment for use in the performance of the Construction Contract;
6. The total amount earned by the Claimant for labor, materials, or equipment furnished as of the date of the Claim;
7. The total amount of previous payments received by the Claimant; and

8. The total amount due and unpaid to the Claimant for labor, materials, or equipment furnished as of the date of the Claim.

16.2 **Claimant:** An individual or entity having a direct contract with the Contractor or with a subcontractor of the Contractor to furnish labor, materials, or equipment for use in the performance of the Construction Contract. The term Claimant also includes any individual or entity that has rightfully asserted a claim under an applicable mechanic's lien or similar statute against the real property upon which the Project is located. The intent of this Bond shall be to include without limitation in the terms of "labor, materials, or equipment" that part of the water, gas, power, light, heat, oil, gasoline, telephone service, or rental equipment used in the Construction Contract, architectural and engineering services required for performance of the work of the Contractor and the Contractor's subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials or equipment were furnished.

16.3 **Construction Contract:** The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and all changes made to the agreement and the Contract Documents.

16.4 **Owner Default:** Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.

16.5 **Contract Documents:** All the documents that comprise the agreement between the Owner and Contractor.

17. If this Bond is issued for an agreement between a contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

18. Modifications to this Bond are as follows:

CERTIFICATE OF SUBSTANTIAL COMPLETION

Owner:	City of Fayetteville, AR	Owner's Contract No.:	
Contractor:		Contractor's Project No.:	
Engineer:	Watershed Conservation Resource Center	Engineer's Project No.:	WCRC-21-01
Project:	Tanglewood Branch Channel Restoration and Aquatic Habitat Improvement Project	Contract Name:	Tanglewood Branch Channel Restoration and Aquatic Habitat Improvement Project

This [preliminary] [final] Certificate of Substantial Completion applies to:

☐ All Work ☐ The following specified portions of the Work:

Date of Substantial Completion

The Work to which this Certificate applies has been inspected by authorized representatives of Owner, Contractor, and Engineer, and found to be substantially complete. The Date of Substantial Completion of the Work or portion thereof designated above is hereby established, subject to the provisions of the Contract pertaining to Substantial Completion. The date of Substantial Completion in the final Certificate of Substantial Completion marks the commencement of the contractual correction period and applicable warranties required by the Contract.

A punch list of items to be completed or corrected is attached to this Certificate. This list may not be all-inclusive, and the failure to include any items on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract.

The responsibilities between Owner and Contractor for security, operation, safety, maintenance, heat, utilities, insurance, and warranties upon Owner's use or occupancy of the Work shall be as provided in the Contract, except as amended as follows: *[Note: Amendments of contractual responsibilities recorded in this Certificate should be the product of mutual agreement of Owner and Contractor; see Paragraph 15.03.D of the General Conditions.]*

Amendments to Owner's responsibilities:

☐ None
☐ As follows

Amendments to Contractor's responsibilities:

☐ None
☐ As follows

The following documents are attached to and made a part of this Certificate: *[punch list; others]*

This Certificate does not constitute an acceptance of Work not in accordance with the Contract Documents, nor is it a release of Contractor's obligation to complete the Work in accordance with the Contract.

EXECUTED BY ENGINEER:

RECEIVED:

RECEIVED:

By: _____ (Authorized signature)	By: _____ Owner (Authorized Signature)	By: _____ Contractor (Authorized Signature)
Title: _____	Title: _____	Title: _____
Date: _____	Date: _____	Date: _____

STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

TABLE OF CONTENTS

	Page
Article 1 – Definitions and Terminology	1
1.01 Defined Terms	1
1.02 Terminology	5
Article 2 – Preliminary Matters	6
2.01 Delivery of Bonds and Evidence of Insurance	6
2.02 Copies of Documents	6
2.03 Before Starting Construction.....	6
2.04 Preconstruction Conference; Designation of Authorized Representatives	7
2.05 Initial Acceptance of Schedules.....	7
2.06 Electronic Transmittals.....	7
Article 3 – Documents: Intent, Requirements, Reuse	8
3.01 Intent.....	8
3.02 Reference Standards	8
3.03 Reporting and Resolving Discrepancies	8
3.04 Requirements of the Contract Documents	9
3.05 Reuse of Documents	10
Article 4 – Commencement and Progress of the Work	10
4.01 Commencement of Contract Times; Notice to Proceed	10
4.02 Starting the Work.....	10
4.03 Reference Points	10
4.04 Progress Schedule	10
4.05 Delays in Contractor's Progress	11
Article 5 – Availability of Lands; Subsurface and Physical Conditions; Hazardous Environmental Conditions	12
5.01 Availability of Lands	12
5.02 Use of Site and Other Areas	12
5.03 Subsurface and Physical Conditions.....	13
5.04 Differing Subsurface or Physical Conditions	14
5.05 Underground Facilities	15

5.06	Hazardous Environmental Conditions at Site	17
Article 6 – Bonds and Insurance		19
6.01	Performance, Payment, and Other Bonds	19
6.02	Insurance—General Provisions	19
6.03	Contractor’s Insurance	20
6.04	Owner’s Liability Insurance	23
6.05	Property Insurance	23
6.06	Waiver of Rights	25
6.07	Receipt and Application of Property Insurance Proceeds	25
Article 7 – Contractor’s Responsibilities		26
7.01	Supervision and Superintendence	26
7.02	Labor; Working Hours	26
7.03	Services, Materials, and Equipment	26
7.04	“Or Equals”	27
7.05	Substitutes	28
7.06	Concerning Subcontractors, Suppliers, and Others	29
7.07	Patent Fees and Royalties	30
7.08	Permits	31
7.09	Taxes	31
7.10	Laws and Regulations	31
7.11	Record Documents	32
7.12	Safety and Protection	32
7.13	Safety Representative	33
7.14	Hazard Communication Programs	33
7.15	Emergencies	33
7.16	Shop Drawings, Samples, and Other Submittals	33
7.17	Contractor’s General Warranty and Guarantee	35
7.18	Indemnification	36
7.19	Delegation of Professional Design Services	37
Article 8 – Other Work at the Site		37
8.01	Other Work	37
8.02	Coordination	38
8.03	Legal Relationships	38

Article 9 – Owner’s Responsibilities	39
9.01 Communications to Contractor.....	39
9.02 Replacement of Engineer	39
9.03 Furnish Data	39
9.04 Pay When Due.....	40
9.05 Lands and Easements; Reports, Tests, and Drawings	40
9.06 Insurance.....	40
9.07 Change Orders.....	40
9.08 Inspections, Tests, and Approvals.....	40
9.09 Limitations on Owner’s Responsibilities	40
9.10 Undisclosed Hazardous Environmental Condition	40
9.11 Evidence of Financial Arrangements.....	40
9.12 Safety Programs	40
Article 10 – Engineer’s Status During Construction.....	41
10.01 Owner’s Representative.....	41
10.02 Visits to Site.....	41
10.03 Project Representative.....	41
10.04 Rejecting Defective Work.....	41
10.05 Shop Drawings, Change Orders and Payments.....	41
10.06 Determinations for Unit Price Work	42
10.07 Decisions on Requirements of Contract Documents and Acceptability of Work.....	42
10.08 Limitations on Engineer’s Authority and Responsibilities.....	42
10.09 Compliance with Safety Program.....	42
Article 11 – Amending the Contract Documents; Changes in the Work	43
11.01 Amending and Supplementing Contract Documents.....	43
11.02 Owner-Authorized Changes in the Work	43
11.03 Unauthorized Changes in the Work	44
11.04 Change of Contract Price.....	44
11.05 Change of Contract Times	45
11.06 Change Proposals	45
11.07 Execution of Change Orders.....	46
11.08 Notification to Surety.....	46
Article 12 – Claims.....	46

12.01	Claims	46
Article 13 – Cost of the Work; Allowances; Unit Price Work		48
13.01	Cost of the Work	48
13.02	Allowances	50
13.03	Unit Price Work	50
Article 14 – Tests and Inspections; Correction, Removal or Acceptance of Defective Work.....		51
14.01	Access to Work.....	51
14.02	Tests, Inspections, and Approvals	51
14.03	Defective Work.....	52
14.04	Acceptance of Defective Work.....	53
14.05	Uncovering Work	53
14.06	Owner May Stop the Work	53
14.07	Owner May Correct Defective Work.....	54
Article 15 – Payments to Contractor; Set-Offs; Completion; Correction Period.....		54
15.01	Progress Payments	54
15.02	Contractor’s Warranty of Title	57
15.03	Substantial Completion	57
15.04	Partial Use or Occupancy	58
15.05	Final Inspection	59
15.06	Final Payment.....	59
15.07	Waiver of Claims	60
15.08	Correction Period	60
Article 16 – Suspension of Work and Termination		61
16.01	Owner May Suspend Work	61
16.02	Owner May Terminate for Cause	61
16.03	Owner May Terminate For Convenience	62
16.04	Contractor May Stop Work or Terminate	63
Article 17 – Final Resolution of Disputes		63
17.01	Methods and Procedures	63
Article 18 – Miscellaneous		64
18.01	Giving Notice	64
18.02	Computation of Times.....	64
18.03	Cumulative Remedies	64

18.04	Limitation of Damages	64
18.05	No Waiver.....	64
18.06	Survival of Obligations	64
18.07	Controlling Law	64
18.08	Headings.....	64

Contract - Bid 21-50
Tanglewood Branch Restoration
Appendix A - City Bid Package

ARTICLE 1 – DEFINITIONS AND TERMINOLOGY

1.01 Defined Terms

- A. Wherever used in the Bidding Requirements or Contract Documents, a term printed with initial capital letters, including the term's singular and plural forms, will have the meaning indicated in the definitions below. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.
1. *Addenda*—Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.
 2. *Agreement*—The written instrument, executed by Owner and Contractor, that sets forth the Contract Price and Contract Times, identifies the parties and the Engineer, and designates the specific items that are Contract Documents.
 3. *Application for Payment*—The form acceptable to Engineer and City which is to be used by Contractor during the course of the Work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.
 4. *Bid*—The offer of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
 5. *Bidder*—An individual or entity that submits a Bid to Owner.
 6. *Bidding Documents*—The Bidding Requirements, the proposed Contract Documents, and all Addenda.
 7. *Bidding Requirements*—The advertisement or invitation to bid, Instructions to Bidders, Bid Bond or other Bid security, if any, the Bid Form, and the Bid with any attachments.
 8. *Change Order*—A document which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, or other revision to the Contract, issued on or after the Effective Date of the Contract.
 9. *Change Proposal*—A written request by Contractor, duly submitted in compliance with the procedural requirements set forth herein, seeking an adjustment in Contract Price or Contract Times, or both; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; challenging a set-off against payments due; or seeking other relief with respect to the terms of the Contract.
 10. *Claim*—(a) A demand or assertion by Owner directly to Contractor, duly submitted in compliance with the procedural requirements set forth herein: seeking an adjustment of Contract Price or Contract Times, or both; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; contesting Engineer's decision regarding a Change Proposal; seeking resolution of a contractual issue that Engineer has declined to address; or seeking other relief with respect to the terms of the Contract; or (b) a demand or assertion by Contractor directly to Owner, duly submitted in compliance with the procedural requirements set forth herein, contesting Engineer's decision regarding a Change Proposal; or seeking resolution of a contractual issue that Engineer

has declined to address. A demand for money or services by a third party is not a Claim.

11. *Constituent of Concern*—Asbestos, petroleum, radioactive materials, polychlorinated biphenyls (PCBs), hazardous waste, and any substance, product, waste, or other material of any nature whatsoever that is or becomes listed, regulated, or addressed pursuant to (a) the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. §§9601 et seq. (“CERCLA”); (b) the Hazardous Materials Transportation Act, 49 U.S.C. §§5501 et seq.; (c) the Resource Conservation and Recovery Act, 42 U.S.C. §§6901 et seq. (“RCRA”); (d) the Toxic Substances Control Act, 15 U.S.C. §§2601 et seq.; (e) the Clean Water Act, 33 U.S.C. §§1251 et seq.; (f) the Clean Air Act, 42 U.S.C. §§7401 et seq.; or (g) any other federal, state, or local statute, law, rule, regulation, ordinance, resolution, code, order, or decree regulating, relating to, or imposing liability or standards of conduct concerning, any hazardous, toxic, or dangerous waste, substance, or material.
12. *Contract*—The entire and integrated written contract between the Owner and Contractor concerning the Work.
13. *Contract Documents*—Those items so designated in the Agreement, and which together comprise the Contract.
14. *Contract Price*—The money that Owner has agreed to pay Contractor for completion of the Work in accordance with the Contract Documents.
15. *Contract Times*—The number of calendar days or the dates by which Contractor shall: (a) achieve Milestones, if any; (b) achieve Substantial Completion; and (c) complete the Work.
16. *Contractor*—The individual or entity with which Owner has contracted for performance of the Work.
17. *Cost of the Work*—See Paragraph 13.01 for definition.
18. *Drawings*—The part of the Contract that graphically shows the scope, extent, and character of the Work to be performed by Contractor.
19. *Effective Date of the Contract*—The date, indicated in the Agreement, on which the Contract becomes effective.
20. *Engineer*—The individual or entity named as such in the Agreement. For the purposes of the Agreement, the Watershed Conservation Resource Center is the Engineer.
21. *Field Order*—A written order issued by Engineer which requires minor changes in the Work but does not change the Contract Price or the Contract Times.
22. *Hazardous Environmental Condition*—The presence at the Site of Constituents of Concern in such quantities or circumstances that may present a danger to persons or property exposed thereto. The presence at the Site of materials that are necessary for the execution of the Work, or that are to be incorporated in the Work, and that are controlled and contained pursuant to industry practices, Laws and Regulations, and the requirements of the Contract, does not establish a Hazardous Environmental Condition.
23. *Laws and Regulations; Laws or Regulations*—Any and all applicable laws, statutes, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.

24. *Liens*—Charges, security interests, or encumbrances upon Contract-related funds, real property, or personal property.
25. *Milestone*—A principal event in the performance of the Work that the Contract requires Contractor to achieve by an intermediate completion date or by a time prior to Substantial Completion of all the Work.
26. *Notice of Award*—The written notice by Owner to a Bidder of Owner's acceptance of the Bid.
27. *Notice to Proceed*—A written notice by Owner to Contractor fixing the date on which the Contract Times will commence to run and on which Contractor shall start to perform the Work.
28. *Owner*—The individual or entity with which Contractor has contracted regarding the Work, and which has agreed to pay Contractor for the performance of the Work, pursuant to the terms of the Contract. The Owner for purposes of this project is the City of Fayetteville, AR.
29. *Progress Schedule*—A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising the Contractor's plan to accomplish the Work within the Contract Times.
30. *Project*—The total undertaking to be accomplished for Owner by engineers, contractors, and others, including planning, study, design, construction, testing, commissioning, and start-up, and of which the Work to be performed under the Contract Documents is a part.
31. *Project Manual*—The written documents prepared for, or made available for, procuring and constructing the Work, including but not limited to the Bidding Documents or other construction procurement documents, geotechnical and existing conditions information, the Agreement, bond forms, General Conditions, Supplementary Conditions, and Specifications. The contents of the Project Manual may be bound in one or more volumes.
32. *Resident Project Representative*—The authorized representative of Engineer assigned to assist Engineer at the Site. As used herein, the term Resident Project Representative or "RPR" includes any assistants or field staff of Resident Project Representative.
33. *Samples*—Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and that establish the standards by which such portion of the Work will be judged.
34. *Schedule of Submittals*—A schedule, prepared and maintained by Contractor, of required submittals and the time requirements for Engineer's review of the submittals and the performance of related construction activities.
35. *Schedule of Values*—A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.
36. *Shop Drawings*—All drawings, diagrams, illustrations, schedules, and other data or information that are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work. Shop Drawings, whether approved or not, are not Drawings and are not Contract Documents.

37. *Site*—Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements, and such other lands furnished by Owner which are designated for the use of Contractor.
38. *Specifications*—The part of the Contract that consists of written requirements for materials, equipment, systems, standards, and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable to the Work.
39. *Subcontractor*—An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work.
40. *Substantial Completion*—The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms “substantially complete” and “substantially completed” as applied to all or part of the Work refer to Substantial Completion thereof.
41. *Successful Bidder*—The Bidder whose Bid the Owner accepts, and to which the Owner makes an award of contract, subject to stated conditions.
42. *Supplementary Conditions*—The part of the Contract that amends or supplements these General Conditions.
43. *Supplier*—A manufacturer, fabricator, supplier, distributor, materialman, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or a Subcontractor.
44. *Technical Data*—Those items expressly identified as Technical Data in the Supplementary Conditions, with respect to either (a) subsurface conditions at the Site, or physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities) or (b) Hazardous Environmental Conditions at the Site. If no such express identifications of Technical Data have been made with respect to conditions at the Site, then the data contained in boring logs, recorded measurements of subsurface water levels, laboratory test results, and other factual, objective information regarding conditions at the Site that are set forth in any geotechnical or environmental report prepared for the Project and made available to Contractor are hereby defined as Technical Data with respect to conditions at the Site under Paragraphs 5.03, 5.04, and 5.06.
45. *Underground Facilities*—All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including but not limited to those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, fiber optic transmissions, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.
46. *Unit Price Work*—Work to be paid for on the basis of unit prices.
47. *Work*—The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction; furnishing, installing, and incorporating all materials and equipment into such construction; and may include related services such as testing, start-up, and commissioning, all as required by the Contract Documents.

48. *Work Change Directive*—A written directive to Contractor issued on or after the Effective Date of the Contract, signed by Owner and recommended by Engineer, ordering an addition, deletion, or revision in the Work.

1.02 Terminology

- A. The words and terms discussed in the following paragraphs are not defined but, when used in the Bidding Requirements or Contract Documents, have the indicated meaning.
- B. *Intent of Certain Terms or Adjectives:*
1. The Contract Documents include the terms “as allowed,” “as approved,” “as ordered,” “as directed” or terms of like effect or import to authorize an exercise of professional judgment by Engineer. In addition, the adjectives “reasonable,” “suitable,” “acceptable,” “proper,” “satisfactory,” or adjectives of like effect or import are used to describe an action or determination of Engineer as to the Work. It is intended that such exercise of professional judgment, action, or determination will be solely to evaluate, in general, the Work for compliance with the information in the Contract Documents and with the design concept of the Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective is not intended to and shall not be effective to assign to Engineer any duty or authority to supervise or direct the performance of the Work, or any duty or authority to undertake responsibility contrary to the provisions of Article 10 or any other provision of the Contract Documents.
- C. *Day:*
1. The word “day” means a calendar day of 24 hours measured from midnight to the next midnight.
- D. *Defective:*
1. The word “defective,” when modifying the word “Work,” refers to Work that is unsatisfactory, faulty, or deficient in that it:
 - a. does not conform to the Contract Documents; or
 - b. does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents; or
 - c. has been damaged prior to Engineer’s recommendation of final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion in accordance with Paragraph 15.03 or 15.04).
- E. *Furnish, Install, Perform, Provide:*
1. The word “furnish,” when used in connection with services, materials, or equipment, shall mean to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.
 2. The word “install,” when used in connection with services, materials, or equipment, shall mean to put into use or place in final position said services, materials, or equipment complete and ready for intended use.

3. The words “perform” or “provide,” when used in connection with services, materials, or equipment, shall mean to furnish and install said services, materials, or equipment complete and ready for intended use.
 4. If the Contract Documents establish an obligation of Contractor with respect to specific services, materials, or equipment, but do not expressly use any of the four words “furnish,” “install,” “perform,” or “provide,” then Contractor shall furnish and install said services, materials, or equipment complete and ready for intended use.
- F. Unless stated otherwise in the Contract Documents, words or phrases that have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

ARTICLE 2 – PRELIMINARY MATTERS

2.01 *Delivery of Bonds and Evidence of Insurance*

- A. *Bonds:* After execution of contract from both parties, Contractor delivers to Owner 100% Performance Bond and 100% Payment Bond Contractor is required to furnish.
- B. *Evidence of Contractor’s Insurance:* After execution of contract from both parties, Contractor shall also deliver to Owner, with copies to each named insured and additional insured (as identified in the Supplementary Conditions or elsewhere in the Contract), the certificates and other evidence of insurance required to be provided by Contractor in accordance with Article 6.
- C. *Evidence of Owner’s Insurance:* After receipt of the executed counterparts of the Agreement and all required bonds and insurance documentation, Owner shall promptly deliver to Contractor, with copies to each named insured and additional insured (as identified in the Supplementary Conditions or otherwise), the certificates and other evidence of insurance required to be provided by Owner under Article 6.

2.02 *Copies of Documents*

- A. Owner shall furnish to Contractor four printed copies of the Contract (including one fully executed counterpart of the Agreement), and one copy in electronic portable document format (PDF). Additional printed copies will be furnished upon request at the cost of reproduction.
- B. Owner shall maintain and safeguard at least one original printed record version of the Contract, including Drawings and Specifications signed and sealed by Engineer and other design professionals. Owner shall make such original printed record version of the Contract available to Contractor for review. Owner may delegate the responsibilities under this provision to Engineer.

2.03 *Before Starting Construction*

- A. *Preliminary Schedules:* Within 10 days after the Effective Date of the Contract (or as otherwise specifically required by the Contract Documents), Contractor shall submit to Engineer for timely review:
 1. a preliminary Progress Schedule indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract;
 2. a preliminary Schedule of Submittals; and

3. a preliminary Schedule of Values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

2.04 Preconstruction Conference; Designation of Authorized Representatives

- A. Before any Work at the Site is started, a conference attended by Owner, Contractor, Engineer, and others as appropriate will be held to establish a working understanding among the parties as to the Work and to discuss the schedules referred to in Paragraph 2.03.A, procedures for handling Shop Drawings, Samples, and other submittals, processing Applications for Payment, electronic or digital transmittals, and maintaining required records.
- B. At this conference Owner and Contractor each shall designate, in writing, a specific individual to act as its authorized representative with respect to the services and responsibilities under the Contract. Such individuals shall have the authority to transmit and receive information, render decisions relative to the Contract, and otherwise act on behalf of each respective party.

2.05 Initial Acceptance of Schedules

- A. At least 10 days before submission of the first Application for Payment a conference, attended by Contractor, Engineer, and others as appropriate, will be held to review for acceptability to Engineer as provided below the schedules submitted in accordance with Paragraph 2.03.A. Contractor shall have an additional 10 days to make corrections and adjustments and to complete and resubmit the schedules. No progress payment shall be made to Contractor until acceptable schedules are submitted to Engineer.
 1. The Progress Schedule will be acceptable to Engineer if it provides an orderly progression of the Work to completion within the Contract Times. Such acceptance will not impose on Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or progress of the Work, nor interfere with or relieve Contractor from Contractor's full responsibility therefor.
 2. Contractor's Schedule of Submittals will be acceptable to Engineer if it provides a workable arrangement for reviewing and processing the required submittals.
 3. Contractor's Schedule of Values will be acceptable to Engineer as to form and substance if it provides a reasonable allocation of the Contract Price to the component parts of the Work.

2.06 Electronic Transmittals

- A. Except as otherwise stated elsewhere in the Contract, the Owner, Engineer, and Contractor may transmit, and shall accept, Project-related correspondence, text, data, documents, drawings, information, and graphics, including but not limited to Shop Drawings and other submittals, in electronic media or digital format, either directly, or through access to a secure Project website.
- B. If the Contract does not establish protocols for electronic or digital transmittals, then Owner, Engineer, and Contractor shall jointly develop such protocols.
- C. When transmitting items in electronic media or digital format, the transmitting party makes no representations as to long term compatibility, usability, or readability of the items resulting from the recipient's use of software application packages, operating systems, or

computer hardware differing from those used in the drafting or transmittal of the items, or from those established in applicable transmittal protocols.

ARTICLE 3 – DOCUMENTS: INTENT, REQUIREMENTS, REUSE

3.01 Intent

- A. The Contract Documents are complementary; what is required by one is as binding as if required by all.
- B. It is the intent of the Contract Documents to describe a functionally complete project (or part thereof) to be constructed in accordance with the Contract Documents.
- C. Unless otherwise stated in the Contract Documents, if there is a discrepancy between the electronic or digital versions of the Contract Documents (including any printed copies derived from such electronic or digital versions) and the printed record version, the printed record version shall govern.
- D. The Contract supersedes prior negotiations, representations, and agreements, whether written or oral.
- E. Engineer will issue clarifications and interpretations of the Contract Documents as provided herein.

3.02 Reference Standards

- A. Standards Specifications, Codes, Laws and Regulations
 - 1. Reference in the Contract Documents to standard specifications, manuals, reference standards, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, shall mean the standard specification, manual, reference standard, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Contract if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.
 - 2. No provision of any such standard specification, manual, reference standard, or code, or any instruction of a Supplier, shall be effective to change the duties or responsibilities of Owner, Contractor, or Engineer, or any of their subcontractors, consultants, agents, or employees, from those set forth in the part of the Contract Documents prepared by or for Engineer. No such provision or instruction shall be effective to assign to Owner, Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the part of the Contract Documents prepared by or for Engineer.

3.03 Reporting and Resolving Discrepancies

- A. *Reporting Discrepancies:*
 - 1. *Contractor's Verification of Figures and Field Measurements:* Before undertaking each part of the Work, Contractor shall carefully study the Contract Documents, and check and verify pertinent figures and dimensions therein, particularly with respect to applicable field measurements. Contractor shall promptly report in writing to Engineer any conflict, error, ambiguity, or discrepancy that Contractor discovers, or has actual knowledge of, and shall not proceed with any Work affected thereby until the conflict,

error, ambiguity, or discrepancy is resolved, by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract Documents issued pursuant to Paragraph 11.01.

2. *Contractor's Review of Contract Documents:* If, before or during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents, or between the Contract Documents and (a) any applicable Law or Regulation, (b) actual field conditions, (c) any standard specification, manual, reference standard, or code, or (d) any instruction of any Supplier, then Contractor shall promptly report it to Engineer in writing. Contractor shall not proceed with the Work affected thereby (except in an emergency as required by Paragraph 7.15) until the conflict, error, ambiguity, or discrepancy is resolved, by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract Documents issued pursuant to Paragraph 11.01.
3. Contractor shall not be liable to Owner or Engineer for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless Contractor had actual knowledge thereof.

B. *Resolving Discrepancies:*

1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the part of the Contract Documents prepared by or for Engineer shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between such provisions of the Contract Documents and:
 - a. the provisions of any standard specification, manual, reference standard, or code, or the instruction of any Supplier (whether or not specifically incorporated by reference as a Contract Document); or
 - b. the provisions of any Laws or Regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

3.04 *Requirements of the Contract Documents*

- A. During the performance of the Work and until final payment, Contractor and Owner shall submit to the Engineer all matters in question concerning the requirements of the Contract Documents (sometimes referred to as requests for information or interpretation—RFIs), or relating to the acceptability of the Work under the Contract Documents, as soon as possible after such matters arise. Engineer will be the initial interpreter of the requirements of the Contract Documents, and judge of the acceptability of the Work thereunder.
- B. Engineer will, with reasonable promptness, render a written clarification, interpretation, or decision on the issue submitted, or initiate an amendment or supplement to the Contract Documents. Engineer's written clarification, interpretation, or decision will be final and binding on Contractor, unless it appeals by submitting a Change Proposal, and on Owner, unless it appeals by filing a Claim.
- C. If a submitted matter in question concerns terms and conditions of the Contract Documents that do not involve (1) the performance or acceptability of the Work under the Contract Documents, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, then Engineer will promptly give written notice to Owner and Contractor that Engineer is unable to provide a decision or interpretation. If Owner and Contractor are unable to agree on resolution of such a matter in question, either party may pursue resolution as provided in Article 12.

3.05 *Reuse of Documents*

- A. Contractor and its Subcontractors and Suppliers shall not:
1. have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer or its consultants, including electronic media editions, or reuse any such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of Owner and Engineer and specific written verification or adaptation by Engineer; or
 2. have or acquire any title or ownership rights in any other Contract Documents, reuse any such Contract Documents for any purpose without Owner's express written consent, or violate any copyrights pertaining to such Contract Documents.
- B. The prohibitions of this Paragraph 3.05 will survive final payment, or termination of the Contract. Nothing herein shall preclude Contractor from retaining copies of the Contract Documents for record purposes.

ARTICLE 4 – COMMENCEMENT AND PROGRESS OF THE WORK

4.01 *Commencement of Contract Times; Notice to Proceed*

- A. The Contract Times will commence to run on the thirtieth day after the Effective Date of the Contract or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 30 days after the Effective Date of the Contract. In no event will the Contract Times commence to run later than the sixtieth day after the day of Bid opening or the thirtieth day after the Effective Date of the Contract, whichever date is earlier.

4.02 *Starting the Work*

- A. Contractor shall start to perform the Work on the date when the Contract Times commence to run. No Work shall be done at the Site prior to such date.

4.03 *Reference Points*

- A. Owner shall provide engineering surveys to establish reference points for construction which in Engineer's judgment are necessary to enable Contractor to proceed with the Work. Contractor shall be responsible for laying out the Work, shall protect and preserve the established reference points and property monuments, and shall make no changes or relocations without the prior written approval of Owner. Contractor shall report to Engineer whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel.

4.04 *Progress Schedule*

- A. Contractor shall adhere to the Progress Schedule established in accordance with Paragraph 2.05 as it may be adjusted from time to time as provided below.
1. Contractor shall submit to Engineer for acceptance (to the extent indicated in Paragraph 2.05) proposed adjustments in the Progress Schedule that will not result in changing the Contract Times.

2. Proposed adjustments in the Progress Schedule that will change the Contract Times shall be submitted in accordance with the requirements of Article 11.
- B. Contractor shall carry on the Work and adhere to the Progress Schedule during all disputes or disagreements with Owner. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, or during any appeal process, except as permitted by Paragraph 16.04, or as Owner and Contractor may otherwise agree in writing.

4.05 *Delays in Contractor's Progress*

- A. If Owner, Engineer, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in the Contract Times and Contract Price. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.
- B. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delay, disruption, or interference caused by or within the control of Contractor. Delay, disruption, and interference attributable to and within the control of a Subcontractor or Supplier shall be deemed to be within the control of Contractor.
- C. If Contractor's performance or progress is delayed, disrupted, or interfered with by unanticipated causes not the fault of and beyond the control of Owner, Contractor, and those for which they are responsible, then Contractor shall be entitled to an equitable adjustment in Contract Times. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times. Such an adjustment shall be Contractor's sole and exclusive remedy for the delays, disruption, and interference described in this paragraph. Causes of delay, disruption, or interference that may give rise to an adjustment in Contract Times under this paragraph include but are not limited to the following:
 1. severe and unavoidable natural catastrophes such as fires, floods, epidemics, and earthquakes;
 2. abnormal weather conditions;
 3. acts or failures to act of utility owners (other than those performing other work at or adjacent to the Site by arrangement with the Owner, as contemplated in Article 8); and
 4. acts of war or terrorism.
- D. Delays, disruption, and interference to the performance or progress of the Work resulting from the existence of a differing subsurface or physical condition, an Underground Facility that was not shown or indicated by the Contract Documents, or not shown or indicated with reasonable accuracy, and those resulting from Hazardous Environmental Conditions, are governed by Article 5.
- E. Paragraph 8.03 governs delays, disruption, and interference to the performance or progress of the Work resulting from the performance of certain other work at or adjacent to the Site.
- F. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for any delay, disruption, or interference if such delay is concurrent with a delay, disruption, or interference caused by or within the control of Contractor.

- G. Contractor must submit any Change Proposal seeking an adjustment in Contract Price or Contract Times under this paragraph within 30 days of the commencement of the delaying, disrupting, or interfering event.

ARTICLE 5 – AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS

5.01 Availability of Lands

- A. Owner shall furnish the Site. Owner shall notify Contractor of any encumbrances or restrictions not of general application but specifically related to use of the Site with which Contractor must comply in performing the Work.
- B. Upon reasonable written request, Owner shall furnish Contractor with a current statement of record legal title and legal description of the lands upon which permanent improvements are to be made and Owner's interest therein as necessary for giving notice of or filing a mechanic's or construction lien against such lands in accordance with applicable Laws and Regulations.
- C. Contractor shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

5.02 Use of Site and Other Areas

- A. *Limitation on Use of Site and Other Areas:*
 - 1. Contractor shall confine construction equipment, temporary construction facilities, the storage of materials and equipment, and the operations of workers to the Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and such other adjacent areas with construction equipment or other materials or equipment. Contractor shall assume full responsibility for (a) damage to the Site; (b) damage to any such other adjacent areas used for Contractor's operations; (c) damage to any other adjacent land or areas; and (d) for injuries and losses sustained by the owners or occupants of any such land or areas; provided that such damage or injuries result from the performance of the Work or from other actions or conduct of the Contractor or those for which Contractor is responsible.
 - 2. If a damage or injury claim is made by the owner or occupant of any such land or area because of the performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible, Contractor shall (a) take immediate corrective or remedial action as required by Paragraph 7.12, or otherwise; (b) promptly attempt to settle the claim as to all parties through negotiations with such owner or occupant, or otherwise resolve the claim by arbitration or other dispute resolution proceeding, or at law; and (c) to the fullest extent permitted by Laws and Regulations, indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against any such claim, and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any claim or action, legal or equitable, brought by any such owner or occupant against Owner, Engineer, or any other party indemnified hereunder to the extent caused directly or indirectly, in whole or in part

by, or based upon, Contractor's performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible.

- B. *Removal of Debris During Performance of the Work:* During the progress of the Work the Contractor shall keep the Site and other adjacent areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris shall conform to applicable Laws and Regulations.
- C. *Cleaning:* Prior to Substantial Completion of the Work Contractor shall clean the Site and the Work and make it ready for utilization by Owner. At the completion of the Work Contractor shall remove from the Site and adjacent areas all tools, appliances, construction equipment and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.
- D. *Loading of Structures:* Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent structures or land to stresses or pressures that will endanger them.

5.03 *Subsurface and Physical Conditions*

- A. *Reports and Drawings:* The Supplementary Conditions identify:
 - 1. those reports known to Owner of explorations and tests of subsurface conditions at or adjacent to the Site;
 - 2. those drawings known to Owner of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities); and
 - 3. Technical Data contained in such reports and drawings.
- B. *Reliance by Contractor on Technical Data Authorized:* Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely upon the accuracy of the Technical Data (as defined in Article 1) contained in any geotechnical or environmental report prepared for the Project and made available to Contractor. Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, with respect to:
 - 1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto; or
 - 2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or
 - 3. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions, or information.

5.04 Differing Subsurface or Physical Conditions

- A. *Notice by Contractor:* If Contractor believes that any subsurface or physical condition that is uncovered or revealed at the Site either:
1. is of such a nature as to establish that any Technical Data on which Contractor is entitled to rely as provided in Paragraph 5.03 is materially inaccurate; or
 2. is of such a nature as to require a change in the Drawings or Specifications; or
 3. differs materially from that shown or indicated in the Contract Documents; or
 4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;

then Contractor shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except with respect to an emergency) until receipt of a written statement permitting Contractor to do so.

- B. *Engineer's Review:* After receipt of written notice as required by the preceding paragraph, Engineer will promptly review the subsurface or physical condition in question; determine the necessity of Owner's obtaining additional exploration or tests with respect to the condition; conclude whether the condition falls within any one or more of the differing site condition categories in Paragraph 5.04.A above; obtain any pertinent cost or schedule information from Contractor; prepare recommendations to Owner regarding the Contractor's resumption of Work in connection with the subsurface or physical condition in question and the need for any change in the Drawings or Specifications; and advise Owner in writing of Engineer's findings, conclusions, and recommendations.
- C. *Owner's Statement to Contractor Regarding Site Condition:* After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the subsurface or physical condition in question, addressing the resumption of Work in connection with such condition, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations, in whole or in part.
- D. *Possible Price and Times Adjustments:*
1. Contractor shall be entitled to an equitable adjustment in Contract Price or Contract Times, or both, to the extent that the existence of a differing subsurface or physical condition, or any related delay, disruption, or interference, causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:
 - a. such condition must fall within any one or more of the categories described in Paragraph 5.04.A;
 - b. with respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03; and,

- c. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.
2. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times with respect to a subsurface or physical condition if:
 - a. Contractor knew of the existence of such condition at the time Contractor made a commitment to Owner with respect to Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract, or otherwise; or
 - b. the existence of such condition reasonably could have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas expressly required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such commitment; or
 - c. Contractor failed to give the written notice as required by Paragraph 5.04 A.
3. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, or both, then any such adjustment shall be set forth in a Change Order.
4. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, or both, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the subsurface or physical condition in question.

5.05 *Underground Facilities*

- A. *Contractor's Responsibilities:* The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or adjacent to the Site is based on information and data furnished to Owner or Engineer by the owners of such Underground Facilities, including Owner, or by others. Unless it is otherwise expressly provided in the Supplementary Conditions:
 1. Owner and Engineer do not warrant or guarantee the accuracy or completeness of any such information or data provided by others; and
 2. the cost of all of the following will be included in the Contract Price, and Contractor shall have full responsibility for:
 - a. reviewing and checking all information and data regarding existing Underground Facilities at the Site;
 - b. locating all Underground Facilities shown or indicated in the Contract Documents as being at the Site;
 - c. coordination of the Work with the owners (including Owner) of such Underground Facilities, during construction; and
 - d. the safety and protection of all existing Underground Facilities at the Site, and repairing any damage thereto resulting from the Work.
- B. *Notice by Contractor:* If Contractor believes that an Underground Facility that is uncovered or revealed at the Site was not shown or indicated in the Contract Documents, or was not shown or indicated with reasonable accuracy, then Contractor shall, promptly after

becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), identify the owner of such Underground Facility and give written notice to that owner and to Owner and Engineer.

- C. *Engineer's Review:* Engineer will promptly review the Underground Facility and conclude whether such Underground Facility was not shown or indicated in the Contract Documents, or was not shown or indicated with reasonable accuracy; obtain any pertinent cost or schedule information from Contractor; prepare recommendations to Owner regarding the Contractor's resumption of Work in connection with the Underground Facility in question; determine the extent, if any, to which a change is required in the Drawings or Specifications to reflect and document the consequences of the existence or location of the Underground Facility; and advise Owner in writing of Engineer's findings, conclusions, and recommendations. During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.
- D. *Owner's Statement to Contractor Regarding Underground Facility:* After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the Underground Facility in question, addressing the resumption of Work in connection with such Underground Facility, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations in whole or in part.
- E. *Possible Price and Times Adjustments:*
 - 1. Contractor shall be entitled to an equitable adjustment in the Contract Price or Contract Times, or both, to the extent that any existing Underground Facility at the Site that was not shown or indicated in the Contract Documents, or was not shown or indicated with reasonable accuracy, or any related delay, disruption, or interference, causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:
 - a. Contractor did not know of and could not reasonably have been expected to be aware of or to have anticipated the existence or actual location of the Underground Facility in question;
 - b. With respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03;
 - c. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times; and
 - d. Contractor gave the notice required in Paragraph 5.05.B.
 - 2. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, or both, then any such adjustment shall be set forth in a Change Order.
 - 3. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, or both, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the Underground Facility in question.

5.06 Hazardous Environmental Conditions at Site

A. *Reports and Drawings:* The Supplementary Conditions identify:

1. those reports and drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site; and
2. Technical Data contained in such reports and drawings.

B. *Reliance by Contractor on Technical Data Authorized:* Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely on the accuracy of the Technical Data (as defined in Article 1) contained in any geotechnical or environmental report prepared for the Project and made available to Contractor. Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors with respect to:

1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures of construction to be employed by Contractor and safety precautions and programs incident thereto; or
2. other data, interpretations, opinions and information contained in such reports or shown or indicated in such drawings; or
3. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions or information.

C. Contractor shall not be responsible for removing or remediating any Hazardous Environmental Condition encountered, uncovered, or revealed at the Site unless such removal or remediation is expressly identified in the Contract Documents to be within the scope of the Work.

D. Contractor shall be responsible for controlling, containing, and duly removing all Constituents of Concern brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible, and for any associated costs; and for the costs of removing and remediating any Hazardous Environmental Condition created by the presence of any such Constituents of Concern.

E. If Contractor encounters, uncovers, or reveals a Hazardous Environmental Condition whose removal or remediation is not expressly identified in the Contract Documents as being within the scope of the Work, or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, then Contractor shall immediately: (1) secure or otherwise isolate such condition; (2) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by Paragraph 7.15); and (3) notify Owner and Engineer (and promptly thereafter confirm such notice in writing). Owner shall promptly consult with Engineer concerning the necessity for Owner to retain a qualified expert to evaluate such condition or take corrective action, if any. Promptly after consulting with Engineer, Owner shall take such actions as are necessary to permit Owner to timely obtain required permits and provide Contractor the written notice required by Paragraph 5.06.F. If Contractor or anyone for whom Contractor is responsible created the Hazardous Environmental Condition in question, then Owner may remove and remediate the Hazardous Environmental Condition, and impose a set-off against payments to account for the associated costs.

- F. Contractor shall not resume Work in connection with such Hazardous Environmental Condition or in any affected area until after Owner has obtained any required permits related thereto, and delivered written notice to Contractor either (1) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work, or (2) specifying any special conditions under which such Work may be resumed safely.
- G. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, or both, as a result of such Work stoppage or such special conditions under which Work is agreed to be resumed by Contractor, then within 30 days of Owner's written notice regarding the resumption of Work, Contractor may submit a Change Proposal, or Owner may impose a set-off.
- H. If after receipt of such written notice Contractor does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special conditions, then Owner may order the portion of the Work that is in the area affected by such condition to be deleted from the Work, following the contractual change procedures in Article 11. Owner may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 8.
- I. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition (1) was not shown or indicated in the Drawings, Specifications, or other Contract Documents, identified as Technical Data entitled to limited reliance pursuant to Paragraph 5.06.B, or identified in the Contract Documents to be included within the scope of the Work, and (2) was not created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.I shall obligate Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- J. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the failure to control, contain, or remove a Constituent of Concern brought to the Site by Contractor or by anyone for whom Contractor is responsible, or to a Hazardous Environmental Condition created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.J shall obligate Contractor to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- K. The provisions of Paragraphs 5.03, 5.04, and 5.05 do not apply to the presence of Constituents of Concern or to a Hazardous Environmental Condition uncovered or revealed at the Site.

ARTICLE 6 – BONDS AND INSURANCE

6.01 *Performance, Payment, and Other Bonds*

- A. Contractor shall furnish a performance bond and a payment bond, each in an amount at least equal to the Contract Price, as security for the faithful performance and payment of all of Contractor's obligations under the Contract. These bonds shall remain in effect until one year after the date when final payment becomes due or until completion of the correction period specified in Paragraph 15.08, whichever is later, except as provided otherwise by Laws or Regulations, the Supplementary Conditions, or other specific provisions of the Contract. Contractor shall also furnish such other bonds as are required by the Supplementary Conditions or other specific provisions of the Contract.
- B. All bonds shall be in the form prescribed by the Contract except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (as amended and supplemented) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. A bond signed by an agent or attorney-in-fact must be accompanied by a certified copy of that individual's authority to bind the surety. The evidence of authority shall show that it is effective on the date the agent or attorney-in-fact signed the accompanying bond.
- C. Contractor shall obtain the required bonds from surety companies that are duly licensed or authorized in the jurisdiction in which the Project is located to issue bonds in the required amounts.
- D. If the surety on a bond furnished by Contractor is declared bankrupt or becomes insolvent, or its right to do business is terminated in any state or jurisdiction where any part of the Project is located, or the surety ceases to meet the requirements above, then Contractor shall promptly notify Owner and Engineer and shall, within 20 days after the event giving rise to such notification, provide another bond and surety, both of which shall comply with the bond and surety requirements above.
- E. If Contractor has failed to obtain a required bond, Owner may exclude the Contractor from the Site and exercise Owner's termination rights under Article 16.
- F. Upon request, Owner shall provide a copy of the payment bond to any Subcontractor, Supplier, or other person or entity claiming to have furnished labor or materials used in the performance of the Work.

6.02 *Insurance – General Provisions*

- A. Owner and Contractor shall obtain and maintain insurance as required in this Article and in the Supplementary Conditions.
- B. All insurance required by the Contract to be purchased and maintained by Owner or Contractor shall be obtained from insurance companies that are duly licensed or authorized, in the state or jurisdiction in which the Project is located, to issue insurance policies for the required limits and coverages. Unless a different standard is indicated in the Supplementary Conditions, all companies that provide insurance policies required under this Contract shall have an A.M. Best rating of A-VII or better.
- C. Contractor shall deliver to Owner, with copies to each named insured and additional insured (as identified in this Article, in the Supplementary Conditions, or elsewhere in the Contract), certificates of insurance establishing that Contractor has obtained and is

maintaining the policies, coverages, and endorsements required by the Contract. Upon request by Owner or any other insured, Contractor shall also furnish other evidence of such required insurance, including but not limited to copies of policies and endorsements, and documentation of applicable self-insured retentions and deductibles. Contractor may block out (redact) any confidential premium or pricing information contained in any policy or endorsement furnished under this provision.

- D. Owner shall deliver to Contractor, with copies to each named insured and additional insured (as identified in this Article, the Supplementary Conditions, or elsewhere in the Contract), certificates of insurance establishing that Owner has obtained and is maintaining the policies, coverages, and endorsements required of Owner by the Contract (if any). Upon request by Contractor or any other insured, Owner shall also provide other evidence of such required insurance (if any), including but not limited to copies of policies and endorsements, and documentation of applicable self-insured retentions and deductibles. Owner may block out (redact) any confidential premium or pricing information contained in any policy or endorsement furnished under this provision.
- E. Failure of Owner or Contractor to demand such certificates or other evidence of the other party's full compliance with these insurance requirements, or failure of Owner or Contractor to identify a deficiency in compliance from the evidence provided, shall not be construed as a waiver of the other party's obligation to obtain and maintain such insurance.
- F. If either party does not purchase or maintain all of the insurance required of such party by the Contract, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage.
- G. If Contractor has failed to obtain and maintain required insurance, Owner may exclude the Contractor from the Site, impose an appropriate set-off against payment, and exercise Owner's termination rights under Article 16.
- H. Without prejudice to any other right or remedy, if a party has failed to obtain required insurance, the other party may elect to obtain equivalent insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and the Contract Price shall be adjusted accordingly.
- I. Owner does not represent that insurance coverage and limits established in this Contract necessarily will be adequate to protect Contractor or Contractor's interests.
- J. The insurance and insurance limits required herein shall not be deemed as a limitation on Contractor's liability under the indemnities granted to Owner and other individuals and entities in the Contract.

6.03 Contractor's Insurance

- A. *Workers' Compensation:* Contractor shall purchase and maintain workers' compensation and employer's liability insurance for:
 - 1. claims under workers' compensation, disability benefits, and other similar employee benefit acts.
 - 2. United States Longshoreman and Harbor Workers' Compensation Act and Jones Act coverage (if applicable).
 - 3. claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employees (by stop-gap endorsement in monopolist worker's compensation states).

4. Foreign voluntary worker compensation (if applicable).
- B. *Commercial General Liability—Claims Covered:* Contractor shall purchase and maintain commercial general liability insurance, covering all operations by or on behalf of Contractor, on an occurrence basis, against:
1. claims for damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employees.
 2. claims for damages insured by reasonably available personal injury liability coverage.
 3. claims for damages, other than to the Work itself, because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom.
- C. *Commercial General Liability—Form and Content:* Contractor's commercial liability policy shall be written on a 1996 (or later) ISO commercial general liability form (occurrence form) and include the following coverages and endorsements:
1. Products and completed operations coverage:
 - a. Such insurance shall be maintained for three years after final payment.
 - b. Contractor shall furnish Owner and each other additional insured (as identified in the Supplementary Conditions or elsewhere in the Contract) evidence of continuation of such insurance at final payment and three years thereafter.
 2. Blanket contractual liability coverage, to the extent permitted by law, including but not limited to coverage of Contractor's contractual indemnity obligations in Paragraph 7.18.
 3. Broad form property damage coverage.
 4. Severability of interest.
 5. Underground, explosion, and collapse coverage.
 6. Personal injury coverage.
 7. Additional insured endorsements that include both ongoing operations and products and completed operations coverage through ISO Endorsements CG 20 10 10 01 and CG 20 37 10 01 (together); or CG 20 10 07 04 and CG 20 37 07 04 (together); or their equivalent.
 8. For design professional additional insureds, ISO Endorsement CG 20 32 07 04, "Additional Insured—Engineers, Architects or Surveyors Not Engaged by the Named Insured" or its equivalent.
- D. *Automobile liability:* Contractor shall purchase and maintain automobile liability insurance against claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance, or use of any motor vehicle. The automobile liability policy shall be written on an occurrence basis.
- E. *Umbrella or excess liability:* Contractor shall purchase and maintain umbrella or excess liability insurance written over the underlying employer's liability, commercial general liability, and automobile liability insurance described in the paragraphs above. Subject to industry-standard exclusions, the coverage afforded shall follow form as to each and every one of the underlying policies.
- F. *Contractor's pollution liability insurance:* Contractor shall purchase and maintain a policy covering third-party injury and property damage claims, including clean-up costs, as a result of pollution conditions arising from Contractor's operations and completed operations. This

insurance shall be maintained for no less than three years after final completion.

- G. *Additional insureds:* The Contractor's commercial general liability, automobile liability, umbrella or excess, and pollution liability policies shall include and list as additional insureds Owner and Engineer, and any individuals or entities identified in the Supplementary Conditions; include coverage for the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of all such additional insureds; and the insurance afforded to these additional insureds shall provide primary coverage for all claims covered thereby (including as applicable those arising from both ongoing and completed operations) on a non-contributory basis. Contractor shall obtain all necessary endorsements to support these requirements.
- H. *Contractor's professional liability insurance:* If Contractor will provide or furnish professional services under this Contract, through a delegation of professional design services or otherwise, then Contractor shall be responsible for purchasing and maintaining applicable professional liability insurance. This insurance shall provide protection against claims arising out of performance of professional design or related services, and caused by a negligent error, omission, or act for which the insured party is legally liable. It shall be maintained throughout the duration of the Contract and for a minimum of two years after Substantial Completion. If such professional design services are performed by a Subcontractor, and not by Contractor itself, then the requirements of this paragraph may be satisfied through the purchasing and maintenance of such insurance by such Subcontractor.
- I. *General provisions:* The policies of insurance required by this Paragraph 6.03 shall:
 - 1. include at least the specific coverages provided in this Article.
 - 2. be written for not less than the limits of liability provided in this Article and in the Supplementary Conditions, or required by Laws or Regulations, whichever is greater.
 - 3. contain a provision or endorsement that the coverage afforded will not be canceled, materially changed, or renewal refused until at least 10 days prior written notice has been given to Contractor. Within three days of receipt of any such written notice, Contractor shall provide a copy of the notice to Owner, Engineer, and each other insured under the policy.
 - 4. remain in effect at least until final payment (and longer if expressly required in this Article) and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work as a warranty or correction obligation, or otherwise, or returning to the Site to conduct other tasks arising from the Contract Documents.
 - 5. be appropriate for the Work being performed and provide protection from claims that may arise out of or result from Contractor's performance of the Work and Contractor's other obligations under the Contract Documents, whether it is to be performed by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable.
- J. The coverage requirements for specific policies of insurance must be met by such policies, and not by reference to excess or umbrella insurance provided in other policies.

6.04 *Owner's Liability Insurance*

- A. In addition to the insurance required to be provided by Contractor under Paragraph 6.03, Owner, at Owner's option, may purchase and maintain at Owner's expense Owner's own liability insurance as will protect Owner against claims which may arise from operations under the Contract Documents.
- B. Owner's liability policies, if any, operate separately and independently from policies required to be provided by Contractor, and Contractor cannot rely upon Owner's liability policies for any of Contractor's obligations to the Owner, Engineer, or third parties.

6.05 *Property Insurance*

- A. *Builder's Risk:* Unless otherwise provided in the Supplementary Conditions, Contractor shall purchase and maintain builder's risk insurance upon the Work on a completed value basis, in the amount of the full insurable replacement cost thereof (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). This insurance shall:
 - 1. include the Owner and Contractor as named insureds, and all Subcontractors, and any individuals or entities required by the Supplementary Conditions to be insured under such builder's risk policy, as insureds or named insureds. For purposes of the remainder of this Paragraph 6.05, Paragraphs 6.06 and 6.07, and any corresponding Supplementary Conditions, the parties required to be insured shall collectively be referred to as "insureds."
 - 2. be written on a builder's risk "all risk" policy form that shall at least include insurance for physical loss or damage to the Work, temporary buildings, falsework, and materials and equipment in transit, and shall insure against at least the following perils or causes of loss: fire; lightning; windstorm; riot; civil commotion; terrorism; vehicle impact; aircraft; smoke; theft; vandalism and malicious mischief; mechanical breakdown, boiler explosion, and artificially generated electric current; earthquake; volcanic activity, and other earth movement; flood; collapse; explosion; debris removal; demolition occasioned by enforcement of Laws and Regulations; water damage (other than that caused by flood); and such other perils or causes of loss as may be specifically required by the Supplementary Conditions. If insurance against mechanical breakdown, boiler explosion, and artificially generated electric current; earthquake; volcanic activity, and other earth movement, or flood, are not commercially available under builder's risk policies, by endorsement or otherwise, such insurance may be provided through other insurance policies acceptable to Owner and Contractor.
 - 3. cover, as insured property, at least the following: (a) the Work and all materials, supplies, machinery, apparatus, equipment, fixtures, and other property of a similar nature that are to be incorporated into or used in the preparation, fabrication, construction, erection, or completion of the Work, including Owner-furnished or assigned property; (b) spare parts inventory required within the scope of the Contract; and (c) temporary works which are not intended to form part of the permanent constructed Work but which are intended to provide working access to the Site, or to the Work under construction, or which are intended to provide temporary support for the Work under construction, including scaffolding, form work, fences, shoring, falsework, and temporary structures.
 - 4. cover expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects).

5. extend to cover damage or loss to insured property while in temporary storage at the Site or in a storage location outside the Site (but not including property stored at the premises of a manufacturer or Supplier).
 6. extend to cover damage or loss to insured property while in transit.
 7. allow for partial occupation or use of the Work by Owner, such that those portions of the Work that are not yet occupied or used by Owner shall remain covered by the builder's risk insurance.
 8. allow for the waiver of the insurer's subrogation rights, as set forth below.
 9. provide primary coverage for all losses and damages caused by the perils or causes of loss covered.
 10. not include a co-insurance clause.
 11. include an exception for ensuing losses from physical damage or loss with respect to any defective workmanship, design, or materials exclusions.
 12. include performance/hot testing and start-up.
 13. be maintained in effect, subject to the provisions herein regarding Substantial Completion and partial occupancy or use of the Work by Owner, until the Work is complete.
- B. *Notice of Cancellation or Change:* All the policies of insurance (and the certificates or other evidence thereof) required to be purchased and maintained in accordance with this Paragraph 6.05 will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least 10 days prior written notice has been given to the purchasing policyholder. Within three days of receipt of any such written notice, the purchasing policyholder shall provide a copy of the notice to each other insured.
- C. *Deductibles:* The purchaser of any required builder's risk or property insurance shall pay for costs not covered because of the application of a policy deductible.
- D. *Partial Occupancy or Use by Owner:* If Owner will occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work as provided in Paragraph 15.04, then Owner (directly, if it is the purchaser of the builder's risk policy, or through Contractor) will provide notice of such occupancy or use to the builder's risk insurer. The builder's risk insurance shall not be canceled or permitted to lapse on account of any such partial use or occupancy; rather, those portions of the Work that are occupied or used by Owner may come off the builder's risk policy, while those portions of the Work not yet occupied or used by Owner shall remain covered by the builder's risk insurance.
- E. *Additional Insurance:* If Contractor elects to obtain other special insurance to be included in or supplement the builder's risk or property insurance policies provided under this Paragraph 6.05, it may do so at Contractor's expense.
- F. *Insurance of Other Property:* If the express insurance provisions of the Contract do not require or address the insurance of a property item or interest, such as tools, construction equipment, or other personal property owned by Contractor, a Subcontractor, or an employee of Contractor or a Subcontractor, then the entity or individual owning such property item will be responsible for deciding whether to insure it, and if so in what amount.

6.06 *Waiver of Rights*

- A. All policies purchased in accordance with Paragraph 6.05, expressly including the builder's risk policy, shall contain provisions to the effect that in the event of payment of any loss or damage the insurers will have no rights of recovery against any insureds thereunder, or against Engineer or its consultants, or their officers, directors, members, partners, employees, agents, consultants, or subcontractors. Owner and Contractor waive all rights against each other and the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Engineer, its consultants, all Subcontractors, all individuals or entities identified in the Supplementary Conditions as insureds, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, under such policies for losses and damages so caused. None of the above waivers shall extend to the rights that any party making such waiver may have to the proceeds of insurance held by Owner or Contractor as trustee or fiduciary, or otherwise payable under any policy so issued.
- B. Owner waives all rights against Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, for:
 - 1. loss due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to Owner's property or the Work caused by, arising out of, or resulting from fire or other perils whether or not insured by Owner; and
 - 2. loss or damage to the completed Project or part thereof caused by, arising out of, or resulting from fire or other insured peril or cause of loss covered by any property insurance maintained on the completed Project or part thereof by Owner during partial occupancy or use pursuant to Paragraph 15.04, after Substantial Completion pursuant to Paragraph 15.03, or after final payment pursuant to Paragraph 15.06.
- C. Any insurance policy maintained by Owner covering any loss, damage or consequential loss referred to in Paragraph 6.06.B shall contain provisions to the effect that in the event of payment of any such loss, damage, or consequential loss, the insurers will have no rights of recovery against Contractor, Subcontractors, or Engineer, or the officers, directors, members, partners, employees, agents, consultants, or subcontractors of each and any of them.
- D. Contractor shall be responsible for assuring that the agreement under which a Subcontractor performs a portion of the Work contains provisions whereby the Subcontractor waives all rights against Owner, Contractor, all individuals or entities identified in the Supplementary Conditions as insureds, the Engineer and its consultants, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, relating to, or resulting from any of the perils or causes of loss covered by builder's risk insurance and any other property insurance applicable to the Work.

6.07 *Receipt and Application of Property Insurance Proceeds*

- A. Any insured loss under the builder's risk and other policies of insurance required by Paragraph 6.05 will be adjusted and settled with the named insured that purchased the

policy. Such named insured shall act as fiduciary for the other insureds, and give notice to such other insureds that adjustment and settlement of a claim is in progress. Any other insured may state its position regarding a claim for insured loss in writing within 15 days after notice of such claim.

- B. Proceeds for such insured losses may be made payable by the insurer either jointly to multiple insureds, or to the named insured that purchased the policy in its own right and as fiduciary for other insureds, subject to the requirements of any applicable mortgage clause. A named insured receiving insurance proceeds under the builder's risk and other policies of insurance required by Paragraph 6.05 shall distribute such proceeds in accordance with such agreement as the parties in interest may reach, or as otherwise required under the dispute resolution provisions of this Contract or applicable Laws and Regulations.
- C. If no other special agreement is reached, the damaged Work shall be repaired or replaced, the money so received applied on account thereof, and the Work and the cost thereof covered by Change Order, if needed.

ARTICLE 7 – CONTRACTOR'S RESPONSIBILITIES

7.01 Supervision and Superintendence

- A. Contractor shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction.
- B. At all times during the progress of the Work, Contractor shall assign a competent resident superintendent who shall not be replaced without written notice to Owner and Engineer except under extraordinary circumstances.

7.02 Labor; Working Hours

- A. Contractor shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. Contractor shall at all times maintain good discipline and order at the Site.
- B. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site shall be performed during regular working hours, Monday through Friday. Contractor will not perform Work on a Saturday, Sunday, or any legal holiday. Contractor may perform Work outside regular working hours or on Saturdays, Sundays, or legal holidays only with Owner's written consent, which will not be unreasonably withheld.

7.03 Services, Materials, and Equipment

- A. Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start up, and completion of the Work, whether or not such items are specifically called for in the Contract Documents.
- B. All materials and equipment incorporated into the Work shall be of good quality and new, except as otherwise provided in the Contract Documents. All special warranties and

guarantees required by the Specifications shall expressly run to the benefit of Owner. If required by Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment.

- C. All materials and equipment shall be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

7.04 "Or Equals"

- A. Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, this has been done to establish a level of quality to be required for the project. And including but not limited to the specification or description of such an item, the type, function, appearance, and quality required. All references to brand names shall hereby also indicate a product equal to such will be considered as long as product is equivalent, or "or equal". Contractor may request that City and Engineer pre-authorize the use of other items of material or equipment, or items from other proposed suppliers under the circumstances described below.
 - 1. If Engineer in its sole discretion determines that an item of material or equipment proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, Engineer shall deem it an "or equal" item. For the purposes of this paragraph, a proposed item of material or equipment will be considered functionally equal to an item so named if:
 - a. in the exercise of reasonable judgment Engineer determines that:
 - 1) it is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;
 - 2) it will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole;
 - 3) it has a proven record of performance and availability of responsive service; and
 - 4) it is not objectionable to Owner.
 - b. Contractor certifies that, if approved and incorporated into the Work:
 - 1) there will be no increase in cost to the Owner or increase in Contract Times; and
 - 2) it will conform substantially to the detailed requirements of the item named in the Contract Documents.
- B. *Contractor's Expense:* Contractor shall provide all data in support of any proposed "or equal" item at Contractor's expense.
- C. *Engineer's Evaluation and Determination:* Engineer will be allowed a reasonable time to evaluate each "or-equal" request. Engineer may require Contractor to furnish additional data about the proposed "or-equal" item. Engineer will be the sole judge of acceptability. No "or-equal" item will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an "or-equal", which will be evidenced by an approved Shop Drawing or other written communication. Engineer will advise Contractor in writing of any negative determination.

- D. *Effect of Engineer's Determination:* Neither approval nor denial of an "or-equal" request shall result in any change in Contract Price. The Engineer's denial of an "or-equal" request shall be final and binding and may not be reversed through an appeal under any provision of the Contract Documents.
- E. *Treatment as a Substitution Request:* If Engineer determines that an item of material or equipment proposed by Contractor does not qualify as an "or-equal" item, Contractor may request that Engineer considered the proposed item as a substitute pursuant to Paragraph 7.05.

7.05 Substitutes

- A. Unless the specification or description of an item of material or equipment required to be furnished under the Contract Documents contains or is followed by words reading that no substitution is permitted, Contractor may request that City or Engineer authorize the use of other items of material or equipment under the circumstances described below. To the extent possible such requests shall be made before commencement of related construction at the Site.
1. Contractor shall submit sufficient information as provided below to allow the City and Engineer to determine if the item of material or equipment proposed is functionally equivalent to that named and an acceptable substitute therefor. Requests for approved equals shall be submitted no later than ten (10) days prior to bid deadline.
 2. The requirements for review by Engineer will be as set forth in Paragraph 7.05.B, as supplemented by the Specifications, and as Engineer may decide is appropriate under the circumstances.
 3. Contractor shall make written application to Engineer for review of a proposed substitute item of material or equipment that Contractor seeks to furnish or use. The application:
 - a. shall certify that the proposed substitute item will:
 - 1) perform adequately the functions and achieve the results called for by the general design,
 - 2) be similar in substance to that specified, and
 - 3) be suited to the same use as that specified.
 - b. will state:
 - 1) the extent, if any, to which the use of the proposed substitute item will necessitate a change in Contract Times,
 - 2) whether use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with Owner for other work on the Project) to adapt the design to the proposed substitute item, and
 - 3) whether incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty.
 - c. will identify:
 - 1) all variations of the proposed substitute item from that specified, and
 - 2) available engineering, sales, maintenance, repair, and replacement services.

- d. shall contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including but not limited to changes in Contract Price, shared savings, costs of redesign, and claims of other contractors affected by any resulting change.
- B. *Engineer's Evaluation and Determination:* Engineer will be allowed a reasonable time to evaluate each substitute request, and to obtain comments and direction from Owner. Engineer may require Contractor to furnish additional data about the proposed substitute item. Engineer will be the sole judge of acceptability. No substitute will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an acceptable substitute. Engineer's determination will be evidenced by an Addenda, Field Order or a proposed Change Order accounting for the substitution itself and all related impacts, including changes in Contract Price or Contract Times. Engineer will advise Contractor in writing of any negative determination.
- C. *Special Guarantee:* Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any substitute.

7.06 *Concerning Subcontractors, Suppliers, and Others*

- A. Contractor may retain Subcontractors and Suppliers for the performance of parts of the Work. Such Subcontractors and Suppliers must be acceptable to Owner.
- B. Contractor shall retain specific Subcontractors, Suppliers, or other individuals or entities for the performance of designated parts of the Work if required by the Contract to do so.
- C. Subsequent to the submittal of Contractor's Bid or final negotiation of the terms of the Contract, Owner may not require Contractor to retain any Subcontractor, Supplier, or other individual or entity to furnish or perform any of the Work against which Contractor has reasonable objection.
- D. Prior to entry into any binding subcontract or purchase order, Contractor shall submit to Owner the identity of the proposed Subcontractor or Supplier (unless Owner has already deemed such proposed Subcontractor or Supplier acceptable, during the bidding process or otherwise). Such proposed Subcontractor or Supplier shall be deemed acceptable to Owner unless Owner raises a substantive, reasonable objection within five days.
- E. Owner may require the replacement of any Subcontractor, Supplier, or other individual or entity retained by Contractor to perform any part of the Work. Owner also may require Contractor to retain specific replacements; provided, however, that Owner may not require a replacement to which Contractor has a reasonable objection. If Contractor has submitted the identity of certain Subcontractors, Suppliers, or other individuals or entities for acceptance by Owner, and Owner has accepted it (either in writing or by failing to make written objection thereto), then Owner may subsequently revoke the acceptance of any such Subcontractor, Supplier, or other individual or entity so identified solely on the basis of substantive, reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor, Supplier, or other individual or entity.
- F. If Owner requires the replacement of any Subcontractor, Supplier, or other individual or entity retained by Contractor to perform any part of the Work, then Contractor shall be entitled to an adjustment in Contract Price or Contract Times, or both, with respect to the replacement; and Contractor shall initiate a Change Proposal for such adjustment within 30 days of Owner's requirement of replacement.

- G. No acceptance by Owner of any such Subcontractor, Supplier, or other individual or entity, whether initially or as a replacement, shall constitute a waiver of the right of Owner to the completion of the Work in accordance with the Contract Documents.
- H. On a monthly basis Contractor shall submit to Engineer a complete list of all Subcontractors and Suppliers having a direct contract with Contractor, and of all other Subcontractors and Suppliers known to Contractor at the time of submittal.
- I. Contractor shall be fully responsible to Owner and Engineer for all acts and omissions of the Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work just as Contractor is responsible for Contractor's own acts and omissions.
- J. Contractor shall be solely responsible for scheduling and coordinating the work of Subcontractors, Suppliers, and all other individuals or entities performing or furnishing any of the Work.
- K. Contractor shall restrict all Subcontractors, Suppliers, and such other individuals or entities performing or furnishing any of the Work from communicating with Engineer or Owner, except through Contractor or in case of an emergency, or as otherwise expressly allowed herein.
- L. The divisions and sections of the Specifications and the identifications of any Drawings shall not control Contractor in dividing the Work among Subcontractors or Suppliers or delineating the Work to be performed by any specific trade.
- M. All Work performed for Contractor by a Subcontractor or Supplier shall be pursuant to an appropriate contractual agreement that specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract Documents for the benefit of Owner and Engineer.
- N. Owner may furnish to any Subcontractor or Supplier, to the extent practicable, information about amounts paid to Contractor on account of Work performed for Contractor by the particular Subcontractor or Supplier.
- O. Nothing in the Contract Documents:
 - 1. shall create for the benefit of any such Subcontractor, Supplier, or other individual or entity any contractual relationship between Owner or Engineer and any such Subcontractor, Supplier, or other individual or entity; nor
 - 2. shall create any obligation on the part of Owner or Engineer to pay or to see to the payment of any money due any such Subcontractor, Supplier, or other individual or entity except as may otherwise be required by Laws and Regulations.

7.07 *Patent Fees and Royalties*

- A. Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if, to the actual knowledge of Owner or Engineer, its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by Owner in the Contract Documents.
- B. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, and its officers, directors, members, partners, employees, agents,

consultants, and subcontractors from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device specified in the Contract Documents, but not identified as being subject to payment of any license fee or royalty to others required by patent rights or copyrights.

- C. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

7.08 Permits

- A. Unless otherwise provided in the Contract Documents, Contractor shall obtain and pay for all construction permits and licenses. Any fees for licenses or permits issued by the City will be waived; however, the application or permit process shall fully be complied with. Owner shall assist Contractor, when necessary, in obtaining such permits and licenses. Contractor shall pay all governmental charges and inspection fees necessary for the prosecution of the Work which are applicable at the time of the submission of Contractor's Bid (or when Contractor became bound under a negotiated contract). Owner shall pay all charges of utility owners for connections for providing permanent service to the Works

7.09 Taxes

- A. Contractor shall pay all sales, consumer, use, and other similar taxes required to be paid by Contractor in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.

7.10 Laws and Regulations

- A. Contractor shall give all notices required by and shall comply with all Laws and Regulations applicable to the performance of the Work. Except where otherwise expressly required by applicable Laws and Regulations, neither Owner nor Engineer shall be responsible for monitoring Contractor's compliance with any Laws or Regulations.
- B. If Contractor performs any Work or takes any other action knowing or having reason to know that it is contrary to Laws or Regulations, Contractor shall bear all resulting costs and losses, and shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such Work or other action. It shall not be Contractor's responsibility to make certain that the Work described in the Contract Documents is in accordance with Laws and Regulations, but this shall not relieve Contractor of Contractor's obligations under Paragraph 3.03.
- C. Owner or Contractor may give notice to the other party of any changes after the submission

of Contractor's Bid (or after the date when Contractor became bound under a negotiated contract) in Laws or Regulations having an effect on the cost or time of performance of the Work, including but not limited to changes in Laws or Regulations having an effect on procuring permits and on sales, use, value-added, consumption, and other similar taxes. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times resulting from such changes, then within 30 days of such notice Contractor may submit a Change Proposal, or Owner may initiate a Claim.

7.11 *Record Documents*

- A. Contractor shall maintain in a safe place at the Site one printed record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, written interpretations and clarifications, and approved Shop Drawings. Contractor shall keep such record documents in good order and annotate them to show changes made during construction. These record documents, together with all approved Samples, will be available to Engineer for reference. Upon completion of the Work, Contractor shall deliver these record documents to Engineer.

7.12 *Safety and Protection*

- A. Contractor shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work. Such responsibility does not relieve Subcontractors of their responsibility for the safety of persons or property in the performance of their work, nor for compliance with applicable safety Laws and Regulations. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury, or loss to:
 - 1. all persons on the Site or who may be affected by the Work;
 - 2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and
 - 3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, other work in progress, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.
- B. Contractor shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection. Contractor shall notify Owner; the owners of adjacent property, Underground Facilities, and other utilities; and other contractors and utility owners performing work at or adjacent to the Site, when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property or work in progress.
- C. Contractor shall comply with the applicable requirements of Owner's safety programs, if any. The Supplementary Conditions identify any Owner's safety programs that are applicable to the Work.
- D. Contractor shall inform Owner and Engineer of the specific requirements of Contractor's safety program with which Owner's and Engineer's employees and representatives must comply while at the Site.
- E. All damage, injury, or loss to any property referred to in Paragraph 7.12.A.2 or 7.12.A.3 caused, directly or indirectly, in whole or in part, by Contractor, any Subcontractor,

Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by Contractor at its expense (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of Owner or Engineer or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Contractor or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of them).

- F. Contractor's duties and responsibilities for safety and protection shall continue until such time as all the Work is completed and Engineer has issued a notice to Owner and Contractor in accordance with Paragraph 15.06.B that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).
- G. Contractor's duties and responsibilities for safety and protection shall resume whenever Contractor or any Subcontractor or Supplier returns to the Site to fulfill warranty or correction obligations, or to conduct other tasks arising from the Contract Documents.

7.13 *Safety Representative*

- A. Contractor shall designate a qualified and experienced safety representative at the Site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs.

7.14 *Hazard Communication Programs*

- A. Contractor shall be responsible for coordinating any exchange of material safety data sheets or other hazard communication information required to be made available to or exchanged between or among employers at the Site in accordance with Laws or Regulations.

7.15 *Emergencies*

- A. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, Contractor is obligated to act to prevent threatened damage, injury, or loss. Contractor shall give Engineer prompt written notice if Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby or are required as a result thereof. If Engineer determines that a change in the Contract Documents is required because of the action taken by Contractor in response to such an emergency, a Work Change Directive or Change Order will be issued.

7.16 *Shop Drawings, Samples, and Other Submittals*

- A. *Shop Drawing and Sample Submittal Requirements:*

1. Before submitting a Shop Drawing or Sample, Contractor shall have:
 - a. reviewed and coordinated the Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents;
 - b. determined and verified all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto;
 - c. determined and verified the suitability of all materials and equipment offered with respect to the indicated application, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work; and
 - d. determined and verified all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and

safety precautions and programs incident thereto.

2. Each submittal shall bear a stamp or specific written certification that Contractor has satisfied Contractor's obligations under the Contract Documents with respect to Contractor's review of that submittal, and that Contractor approves the submittal.
 3. With each submittal, Contractor shall give Engineer specific written notice of any variations that the Shop Drawing or Sample may have from the requirements of the Contract Documents. This notice shall be set forth in a written communication separate from the Shop Drawings or Sample submittal; and, in addition, in the case of Shop Drawings by a specific notation made on each Shop Drawing submitted to Engineer for review and approval of each such variation.
- B. *Submittal Procedures for Shop Drawings and Samples:* Contractor shall submit Shop Drawings and Samples to Engineer for review and approval in accordance with the accepted Schedule of Submittals. Each submittal will be identified as Engineer may require.
1. *Shop Drawings:*
 - a. Contractor shall submit the number of copies required in the Specifications.
 - b. Data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show Engineer the services, materials, and equipment Contractor proposes to provide and to enable Engineer to review the information for the limited purposes required by Paragraph 7.16.D.
 2. *Samples:*
 - a. Contractor shall submit the number of Samples required in the Specifications.
 - b. Contractor shall clearly identify each Sample as to material, Supplier, pertinent data such as catalog numbers, the use for which intended and other data as Engineer may require to enable Engineer to review the submittal for the limited purposes required by Paragraph 7.16.D.
 3. Where a Shop Drawing or Sample is required by the Contract Documents or the Schedule of Submittals, any related Work performed prior to Engineer's review and approval of the pertinent submittal will be at the sole expense and responsibility of Contractor.
- C. *Other Submittals:* Contractor shall submit other submittals to Engineer in accordance with the accepted Schedule of Submittals, and pursuant to the applicable terms of the Specifications.
- D. *Engineer's Review:*
1. Engineer will provide timely review of Shop Drawings and Samples in accordance with the Schedule of Submittals acceptable to Engineer. Engineer's review and approval will be only to determine if the items covered by the submittals will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.

2. Engineer's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction or to safety precautions or programs incident thereto.
 3. Engineer's review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.
 4. Engineer's review and approval of a Shop Drawing or Sample shall not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has complied with the requirements of Paragraph 7.16.A.3 and Engineer has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample. Engineer will document any such approved variation from the requirements of the Contract Documents in a Field Order.
 5. Engineer's review and approval of a Shop Drawing or Sample shall not relieve Contractor from responsibility for complying with the requirements of Paragraph 7.16.A and B.
 6. Engineer's review and approval of a Shop Drawing or Sample, or of a variation from the requirements of the Contract Documents, shall not, under any circumstances, change the Contract Times or Contract Price, unless such changes are included in a Change Order.
 7. Neither Engineer's receipt, review, acceptance or approval of a Shop Drawing, Sample, or other submittal shall result in such item becoming a Contract Document.
 8. Contractor shall perform the Work in compliance with the requirements and commitments set forth in approved Shop Drawings and Samples, subject to the provisions of Paragraph 7.16.D.4.
- E. *Resubmittal Procedures:*
1. Contractor shall make corrections required by Engineer and shall return the required number of corrected copies of Shop Drawings and submit, as required, new Samples for review and approval. Contractor shall direct specific attention in writing to revisions other than the corrections called for by Engineer on previous submittals.
 2. Contractor shall furnish required submittals with sufficient information and accuracy to obtain required approval of an item with no more than three submittals. Engineer will record Engineer's time for reviewing a fourth or subsequent submittal of a Shop Drawings, sample, or other item requiring approval, and Contractor shall be responsible for Engineer's charges to Owner for such time. Owner may impose a set-off against payments due to Contractor to secure reimbursement for such charges.
 3. If Contractor requests a change of a previously approved submittal item, Contractor shall be responsible for Engineer's charges to Owner for its review time, and Owner may impose a set-off against payments due to Contractor to secure reimbursement for such charges, unless the need for such change is beyond the control of Contractor.

7.17 *Contractor's General Warranty and Guarantee*

- A. Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective. Engineer and its officers, directors, members, partners, employees, agents, consultants, and subcontractors shall be entitled to rely on Contractor's warranty and guarantee.

- B. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:
1. abuse, modification, or improper maintenance or operation by persons other than Contractor, Subcontractors, Suppliers, or any other individual or entity for whom Contractor is responsible; or
 2. normal wear and tear under normal usage.
- C. Contractor's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents or a release of Contractor's obligation to perform the Work in accordance with the Contract Documents:
1. observations by Engineer;
 2. recommendation by Engineer or payment by Owner of any progress or final payment;
 3. the issuance of a certificate of Substantial Completion by Engineer or any payment related thereto by Owner;
 4. use or occupancy of the Work or any part thereof by Owner;
 5. any review and approval of a Shop Drawing or Sample submittal;
 6. the issuance of a notice of acceptability by Engineer;
 7. any inspection, test, or approval by others; or
 8. any correction of defective Work by Owner.
- D. If the Contract requires the Contractor to accept the assignment of a contract entered into by Owner, then the specific warranties, guarantees, and correction obligations contained in the assigned contract shall govern with respect to Contractor's performance obligations to Owner for the Work described in the assigned contract.

7.18 Indemnification

- A. To the fullest extent permitted by Laws and Regulations, and in addition to any other obligations of Contractor under the Contract or otherwise, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the performance of the Work, provided that any such claim, cost, loss, or damage is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom but only to the extent caused by any negligent act or omission of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work or anyone for whose acts any of them may be liable.
- B. In any and all claims against Owner or Engineer or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors by any employee (or the survivor or personal representative of such employee) of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under Paragraph 7.18.A shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for

Contractor or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.

- C. The indemnification obligations of Contractor under Paragraph 7.18.A shall not extend to the liability of Engineer and Engineer's officers, directors, members, partners, employees, agents, consultants and subcontractors arising out of:
 - 1. the preparation or approval of, or the failure to prepare or approve maps, Drawings, opinions, reports, surveys, Change Orders, designs, or Specifications; or
 - 2. giving directions or instructions, or failing to give them, if that is the primary cause of the injury or damage.

7.19 Delegation of Professional Design Services

- A. Contractor will not be required to provide professional design services unless such services are specifically required by the Contract Documents for a portion of the Work or unless such services are required to carry out Contractor's responsibilities for construction means, methods, techniques, sequences and procedures. Contractor shall not be required to provide professional services in violation of applicable Laws and Regulations.
- B. If professional design services or certifications by a design professional related to systems, materials, or equipment are specifically required of Contractor by the Contract Documents, Owner and Engineer will specify all performance and design criteria that such services must satisfy. Contractor shall cause such services or certifications to be provided by a properly licensed professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, and other submittals prepared by such professional. Shop Drawings and other submittals related to the Work designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to Engineer.
- C. Owner and Engineer shall be entitled to rely upon the adequacy, accuracy, and completeness of the services, certifications, or approvals performed by such design professionals, provided Owner and Engineer have specified to Contractor all performance and design criteria that such services must satisfy.
- D. Pursuant to this paragraph, Engineer's review and approval of design calculations and design drawings will be only for the limited purpose of checking for conformance with performance and design criteria given and the design concept expressed in the Contract Documents. Engineer's review and approval of Shop Drawings and other submittals (except design calculations and design drawings) will be only for the purpose stated in Paragraph 7.16.D.1.
- E. Contractor shall not be responsible for the adequacy of the performance or design criteria specified by Owner or Engineer.

ARTICLE 8 – OTHER WORK AT THE SITE

8.01 Other Work

- A. In addition to and apart from the Work under the Contract Documents, the Owner may perform other work at or adjacent to the Site. Such other work may be performed by Owner's employees, or through contracts between the Owner and third parties. Owner may also arrange to have third-party utility owners perform work on their utilities and facilities at or adjacent to the Site.

- B. If Owner performs other work at or adjacent to the Site with Owner's employees, or through contracts for such other work, then Owner shall give Contractor written notice thereof prior to starting any such other work. If Owner has advance information regarding the start of any utility work at or adjacent to the Site, Owner shall provide such information to Contractor.
- C. Contractor shall afford each other contractor that performs such other work, each utility owner performing other work, and Owner, if Owner is performing other work with Owner's employees, proper and safe access to the Site, and provide a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work. Contractor shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. Contractor shall not endanger any work of others by cutting, excavating, or otherwise altering such work; provided, however, that Contractor may cut or alter others' work with the written consent of Engineer and the others whose work will be affected.
- D. If the proper execution or results of any part of Contractor's Work depends upon work performed by others under this Article 8, Contractor shall inspect such other work and promptly report to Engineer in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of Contractor's Work. Contractor's failure to so report will constitute an acceptance of such other work as fit and proper for integration with Contractor's Work except for latent defects and deficiencies in such other work.

8.02 Coordination

- A. If Owner intends to contract with others for the performance of other work at or adjacent to the Site, to perform other work at or adjacent to the Site with Owner's employees, or to arrange to have utility owners perform work at or adjacent to the Site, the following will be set forth in the Supplementary Conditions or provided to Contractor prior to the start of any such other work:
 - 1. the identity of the individual or entity that will have authority and responsibility for coordination of the activities among the various contractors;
 - 2. an itemization of the specific matters to be covered by such authority and responsibility; and
 - 3. the extent of such authority and responsibilities.
- B. Unless otherwise provided in the Supplementary Conditions, Owner shall have sole authority and responsibility for such coordination.

8.03 Legal Relationships

- A. If, in the course of performing other work at or adjacent to the Site for Owner, the Owner's employees, any other contractor working for Owner, or any utility owner causes damage to the Work or to the property of Contractor or its Subcontractors, or delays, disrupts, interferes with, or increases the scope or cost of the performance of the Work, through actions or inaction, then Contractor shall be entitled to an equitable adjustment in the Contract Price or the Contract Times, or both. Contractor must submit any Change Proposal seeking an equitable adjustment in the Contract Price or the Contract Times under this paragraph within 30 days of the damaging, delaying, disrupting, or interfering event. The entitlement to, and extent of, any such equitable adjustment shall take into account information (if any) regarding such other work that was provided to Contractor in the

Contract Documents prior to the submittal of the Bid or the final negotiation of the terms of the Contract. When applicable, any such equitable adjustment in Contract Price shall be conditioned on Contractor assigning to Owner all Contractor's rights against such other contractor or utility owner with respect to the damage, delay, disruption, or interference that is the subject of the adjustment. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.

- B. Contractor shall take reasonable and customary measures to avoid damaging, delaying, disrupting, or interfering with the work of Owner, any other contractor, or any utility owner performing other work at or adjacent to the Site. If Contractor fails to take such measures and as a result damages, delays, disrupts, or interferes with the work of any such other contractor or utility owner, then Owner may impose a set-off against payments due to Contractor, and assign to such other contractor or utility owner the Owner's contractual rights against Contractor with respect to the breach of the obligations set forth in this paragraph.
- C. When Owner is performing other work at or adjacent to the Site with Owner's employees, Contractor shall be liable to Owner for damage to such other work, and for the reasonable direct delay, disruption, and interference costs incurred by Owner as a result of Contractor's failure to take reasonable and customary measures with respect to Owner's other work. In response to such damage, delay, disruption, or interference, Owner may impose a set-off against payments due to Contractor.
- D. If Contractor damages, delays, disrupts, or interferes with the work of any other contractor, or any utility owner performing other work at or adjacent to the Site, through Contractor's failure to take reasonable and customary measures to avoid such impacts, or if any claim arising out of Contractor's actions, inactions, or negligence in performance of the Work at or adjacent to the Site is made by any such other contractor or utility owner against Contractor, Owner, or Engineer, then Contractor shall (1) promptly attempt to settle the claim as to all parties through negotiations with such other contractor or utility owner, or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law, and (2) indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against any such claims, and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such damage, delay, disruption, or interference.

ARTICLE 9 – OWNER'S RESPONSIBILITIES

9.01 Communications to Contractor

- A. Except as otherwise provided in these General Conditions, Owner shall issue all communications to Contractor through Engineer.

9.02 Replacement of Engineer

- A. Owner may at its discretion appoint an engineer to replace Engineer, provided Contractor makes no reasonable objection to the replacement engineer. The replacement engineer's status under the Contract Documents shall be that of the former Engineer.

9.03 Furnish Data

- A. Owner shall promptly furnish the data required of Owner under the Contract Documents.

9.04 Pay When Due

- A. Owner shall make payments to Contractor when they are due as provided in the Agreement.

9.05 Lands and Easements; Reports, Tests, and Drawings

- A. Owner's duties with respect to providing lands and easements are set forth in Paragraph 5.01.
- B. Owner's duties with respect to providing engineering surveys to establish reference points are set forth in Paragraph 4.03.
- C. Article 5 refers to Owner's identifying and making available to Contractor copies of reports of explorations and tests of conditions at the Site, and drawings of physical conditions relating to existing surface or subsurface structures at the Site.

9.06 Insurance

- A. Owner's responsibilities, if any, with respect to purchasing and maintaining liability and property insurance are set forth in Article 6.

9.07 Change Orders

- A. Owner's responsibilities with respect to Change Orders are set forth in Article 11.

9.08 Inspections, Tests, and Approvals

- A. Owner's responsibility with respect to certain inspections, tests, and approvals is set forth in Paragraph 14.02.B.

9.09 Limitations on Owner's Responsibilities

- A. The Owner shall not supervise, direct, or have control or authority over, nor be responsible for, Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Owner will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

9.10 Undisclosed Hazardous Environmental Condition

- A. Owner's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in Paragraph 5.06.

9.11 Evidence of Financial Arrangements

- A. Upon request of Contractor, Owner shall furnish Contractor reasonable evidence that financial arrangements have been made to satisfy Owner's obligations under the Contract Documents (including obligations under proposed changes in the Work).

9.12 Safety Programs

- A. While at the Site, Owner's employees and representatives shall comply with the specific applicable requirements of Contractor's safety programs of which Owner has been informed.
- B. Owner shall furnish copies of any applicable Owner safety programs to Contractor.

ARTICLE 10 – ENGINEER’S STATUS DURING CONSTRUCTION

10.01 *Owner’s Representative*

- A. Engineer will be Owner’s representative during the construction period. The duties and responsibilities and the limitations of authority of Engineer as Owner’s representative during construction are set forth in the Contract.

10.02 *Visits to Site*

- A. Engineer will make visits to the Site at intervals appropriate to the various stages of construction as Engineer deems necessary in order to observe as an experienced and qualified design professional the progress that has been made and the quality of the various aspects of Contractor’s executed Work. Based on information obtained during such visits and observations, Engineer, for the benefit of Owner, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. Engineer will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. Engineer’s efforts will be directed toward providing for Owner a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, Engineer will keep Owner informed of the progress of the Work and will endeavor to guard Owner against defective Work.
- B. Engineer’s visits and observations are subject to all the limitations on Engineer’s authority and responsibility set forth in Paragraph 10.08. Particularly, but without limitation, during or as a result of Engineer’s visits or observations of Contractor’s Work, Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor’s means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work.

10.03 *Project Representative*

- A. If Owner and Engineer have agreed that Engineer will furnish a Resident Project Representative to represent Engineer at the Site and assist Engineer in observing the progress and quality of the Work, then the authority and responsibilities of any such Resident Project Representative will be as provided in the Supplementary Conditions, and limitations on the responsibilities thereof will be as provided in Paragraph 10.08. If Owner designates another representative or agent to represent Owner at the Site who is not Engineer’s consultant, agent, or employee, the responsibilities and authority and limitations thereon of such other individual or entity will be as provided in the Supplementary Conditions.

10.04 *Rejecting Defective Work*

- A. Engineer has the authority to reject Work in accordance with Article 14.

10.05 *Shop Drawings, Change Orders and Payments*

- A. Engineer’s authority, and limitations thereof, as to Shop Drawings and Samples, are set forth in Paragraph 7.16.
- B. Engineer’s authority, and limitations thereof, as to design calculations and design drawings submitted in response to a delegation of professional design services, if any, are set forth in Paragraph 7.19.
- C. Engineer’s authority as to Change Orders is set forth in Article 11.

- D. Engineer's authority as to Applications for Payment is set forth in Article 15.

10.06 Determinations for Unit Price Work

- A. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor as set forth in Paragraph 13.03.

10.07 Decisions on Requirements of Contract Documents and Acceptability of Work

- A. Engineer will render decisions regarding the requirements of the Contract Documents, and judge the acceptability of the Work, pursuant to the specific procedures set forth herein for initial interpretations, Change Proposals, and acceptance of the Work. In rendering such decisions and judgments, Engineer will not show partiality to Owner or Contractor, and will not be liable to Owner, Contractor, or others in connection with any proceedings, interpretations, decisions, or judgments conducted or rendered in good faith.

10.08 Limitations on Engineer's Authority and Responsibilities

- A. Neither Engineer's authority or responsibility under this Article 10 or under any other provision of the Contract, nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by Engineer, shall create, impose, or give rise to any duty in contract, tort, or otherwise owed by Engineer to Contractor, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.
- B. Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Engineer will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.
- C. Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.
- D. Engineer's review of the final Application for Payment and accompanying documentation and all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by Paragraph 15.06 A will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals, that the results certified indicate compliance with the Contract Documents.
- E. The limitations upon authority and responsibility set forth in this Paragraph 10.08 shall also apply to the Resident Project Representative, if any.

10.09 Compliance with Safety Program

- A. While at the Site, Engineer's employees and representatives will comply with the specific applicable requirements of Owner's and Contractor's safety programs (if any) of which Engineer has been informed.

ARTICLE 11 – AMENDING THE CONTRACT DOCUMENTS; CHANGES IN THE WORK

11.01 *Amending and Supplementing Contract Documents*

- A. The Contract Documents may be amended or supplemented by a Change Order, a Work Change Directive, or a Field Order.
1. *Change Orders:*
 - a. If an amendment or supplement to the Contract Documents includes a change in the Contract Price or the Contract Times, such amendment or supplement must be set forth in a Change Order. A Change Order also may be used to establish amendments and supplements of the Contract Documents that do not affect the Contract Price or Contract Times.
 - b. Owner and Contractor may amend those terms and conditions of the Contract Documents that do not involve (1) the performance or acceptability of the Work, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, without the recommendation of the Engineer. Such an amendment shall be set forth in a Change Order.
 2. *Work Change Directives:* A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the modification ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order, following negotiations by the parties as to the Work Change Directive's effect, if any, on the Contract Price and Contract Times; or, if negotiations are unsuccessful, by a determination under the terms of the Contract Documents governing adjustments, expressly including Paragraph 11.04 regarding change of Contract Price. Contractor must submit any Change Proposal seeking an adjustment of the Contract Price or the Contract Times, or both, no later than 30 days after the completion of the Work set out in the Work Change Directive. Owner must submit any Claim seeking an adjustment of the Contract Price or the Contract Times, or both, no later than 60 days after issuance of the Work Change Directive.
 3. *Field Orders:* Engineer may authorize minor changes in the Work if the changes do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Such changes will be accomplished by a Field Order and will be binding on Owner and also on Contractor, which shall perform the Work involved promptly. If Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, or both, then before proceeding with the Work at issue, Contractor shall submit a Change Proposal as provided herein.

11.02 *Owner-Authorized Changes in the Work*

- A. Without invalidating the Contract and without notice to any surety, Owner may, at any time or from time to time, order additions, deletions, or revisions in the Work. Such changes shall be supported by Engineer's recommendation, to the extent the change involves the design (as set forth in the Drawings, Specifications, or otherwise), or other engineering or technical matters. Such changes may be accomplished by a Change Order, if Owner and Contractor have agreed as to the effect, if any, of the changes on Contract Times or Contract Price; or by a Work Change Directive. Upon receipt of any such document, Contractor shall promptly proceed with the Work involved; or, in the case of a deletion in the Work, promptly cease construction activities with respect to such deleted Work. Added or revised Work shall be performed under the applicable conditions of the

Contract Documents. Nothing in this paragraph shall obligate Contractor to undertake work that Contractor reasonably concludes cannot be performed in a manner consistent with Contractor's safety obligations under the Contract Documents or Laws and Regulations.

11.03 Unauthorized Changes in the Work

- A. Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents, as amended, modified, or supplemented, except in the case of an emergency as provided in Paragraph 7.15 or in the case of uncovering Work as provided in Paragraph 14.05.

11.04 Change of Contract Price

- A. The Contract Price may only be changed by a Change Order approved in advanced and signed by the proper City representative. Any Change Proposal for an adjustment in the Contract Price shall comply with the provisions of Paragraph 11.06. Any Claim for an adjustment of Contract Price shall comply with the provisions of Article 12.
- B. An adjustment in the Contract Price will be determined as follows:
 - 1. where the Work involved is covered by unit prices contained in the Contract Documents, then by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 13.03); or
 - 2. where the Work involved is not covered by unit prices contained in the Contract Documents, then by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 11.04.C.2); or
 - 3. where the Work involved is not covered by unit prices contained in the Contract Documents and the parties do not reach mutual agreement to a lump sum, then on the basis of the Cost of the Work (determined as provided in Paragraph 13.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 11.04.C).
- C. *Contractor's Fee.* When applicable, the Contractor's fee for overhead and profit shall be determined as follows:
 - 1. a mutually acceptable fixed fee; or
 - 2. if a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:
 - a. for costs incurred under Paragraphs 13.01.B.1 and 13.01.B.2, the Contractor's fee shall be 15 percent;
 - b. for costs incurred under Paragraph 13.01.B.3, the Contractor's fee shall be five percent;
 - c. where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of Paragraphs 11.01.C.2.a and 11.01.C.2.b is that the Contractor's fee shall be based on: (1) a fee of 15 percent of the costs incurred under Paragraphs 13.01.A.1 and 13.01.A.2 by the Subcontractor that actually performs the Work, at whatever tier, and (2) with respect to Contractor itself and to any Subcontractors of a tier higher than that of the Subcontractor that actually performs the Work, a fee of five percent of the amount (fee plus underlying costs incurred) attributable to the next lower tier Subcontractor; provided, however, that for any such subcontracted work the

maximum total fee to be paid by Owner shall be no greater than 27 percent of the costs incurred by the Subcontractor that actually performs the work;

- d. no fee shall be payable on the basis of costs itemized under Paragraphs 13.01.B.4, 13.01.B.5, and 13.01.C;
- e. the amount of credit to be allowed by Contractor to Owner for any change which results in a net decrease in cost will be the amount of the actual net decrease in cost plus a deduction in Contractor's fee by an amount equal to five percent of such net decrease; and
- f. when both additions and credits are involved in any one change, the adjustment in Contractor's fee shall be computed on the basis of the net change in accordance with Paragraphs 11.04.C.2.a through 11.04.C.2.e, inclusive.

11.05 *Change of Contract Times*

- A. The Contract Times may only be changed by an executed Change Order signed by Owner and Contractor. Any Change Proposal for an adjustment in the Contract Times shall comply with the provisions of Paragraph 11.06. Any Claim for an adjustment in the Contract Times shall comply with the provisions of Article 12.
- B. An adjustment of the Contract Times shall be subject to the limitations set forth in Paragraph 4.05, concerning delays in Contractor's progress.

11.06 *Change Proposals*

- A. Contractor shall submit a Change Proposal to Engineer to request an adjustment in the Contract Times or Contract Price; appeal an initial decision by Engineer concerning the requirements of the Contract Documents or relating to the acceptability of the Work under the Contract Documents; contest a set-off against payment due; or seek other relief under the Contract. The Change Proposal shall specify any proposed change in Contract Times or Contract Price, or both, or other proposed relief, and explain the reason for the proposed change, with citations to any governing or applicable provisions of the Contract Documents.
 - 1. *Procedures:* Contractor shall submit each Change Proposal to Engineer promptly (but in no event later than 30 days) after the start of the event giving rise thereto, or after such initial decision. The Contractor shall submit supporting data, including the proposed change in Contract Price or Contract Time (if any), to the Engineer and Owner within 15 days after the submittal of the Change Proposal. The supporting data shall be accompanied by a written statement that the supporting data are accurate and complete, and that any requested time or price adjustment is the entire adjustment to which Contractor believes it is entitled as a result of said event. Engineer will advise Owner regarding the Change Proposal, and consider any comments or response from Owner regarding the Change Proposal.
 - 2. *Engineer's Action:* Engineer will review each Change Proposal and, within 30 days after receipt of the Contractor's supporting data, either deny the Change Proposal in whole, approve it in whole, or deny it in part and approve it in part. Such actions shall be in writing, with a copy provided to Owner and Contractor. If Engineer does not take action on the Change Proposal within 30 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of Engineer's inaction the Change Proposal is deemed denied, thereby commencing the time for appeal of the denial under Article 12.

3. *Binding Decision:* Engineer's decision will be final and binding upon Owner and Contractor, unless Owner or Contractor appeals the decision by filing a Claim under Article 12.
- B. *Resolution of Certain Change Proposals:* If the Change Proposal does not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters, then Engineer will notify the parties that the Engineer is unable to resolve the Change Proposal. For purposes of further resolution of such a Change Proposal, such notice shall be deemed a denial, and Contractor may choose to seek resolution under the terms of Article 12.

11.07 Execution of Change Orders

- A. Owner and Contractor shall execute appropriate Change Orders covering:
 1. changes in the Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive;
 2. changes in Contract Price resulting from an Owner set-off, unless Contractor has duly contested such set-off;
 3. changes in the Work which are: (a) ordered by Owner pursuant to Paragraph 11.02, (b) required because of Owner's acceptance of defective Work under Paragraph 14.04 or Owner's correction of defective Work under Paragraph 14.07, or (c) agreed to by the parties, subject to the need for Engineer's recommendation if the change in the Work involves the design (as set forth in the Drawings, Specifications, or otherwise), or other engineering or technical matters; and
 4. changes in the Contract Price or Contract Times, or other changes, which embody the substance of any final and binding results under Paragraph 11.06, or Article 12.
- B. If Owner or Contractor refuses to execute a Change Order that is required to be executed under the terms of this Paragraph 11.07, it shall be deemed to be of full force and effect, as if fully executed.

11.08 Notification to Surety

- A. If the provisions of any bond require notice to be given to a surety of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times), the giving of any such notice will be Contractor's responsibility. The amount of each applicable bond will be adjusted to reflect the effect of any such change.

ARTICLE 12 – CLAIMS

12.01 Claims

- A. *Claims Process:* The following disputes between Owner and Contractor shall be submitted to the Claims process set forth in this Article:
 1. Appeals by Owner or Contractor of Engineer's decisions regarding Change Proposals;
 2. Owner demands for adjustments in the Contract Price or Contract Times, or other relief under the Contract Documents; and

3. Disputes that Engineer has been unable to address because they do not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters.
- B. *Submittal of Claim:* The party submitting a Claim shall deliver it directly to the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto; in the case of appeals regarding Change Proposals within 30 days of the decision under appeal. The party submitting the Claim shall also furnish a copy to the Engineer, for its information only. The responsibility to substantiate a Claim shall rest with the party making the Claim. In the case of a Claim by Contractor seeking an increase in the Contract Times or Contract Price, or both, Contractor shall certify that the Claim is made in good faith, that the supporting data are accurate and complete, and that to the best of Contractor's knowledge and belief the amount of time or money requested accurately reflects the full amount to which Contractor is entitled.
- C. *Review and Resolution:* The party receiving a Claim shall review it thoroughly, giving full consideration to its merits. The two parties shall seek to resolve the Claim through the exchange of information and direct negotiations. The parties may extend the time for resolving the Claim by mutual agreement. All actions taken on a Claim shall be stated in writing and submitted to the other party, with a copy to Engineer.
- D. *Mediation:*
1. At any time after initiation of a Claim, Owner and Contractor may mutually agree to mediation of the underlying dispute. The agreement to mediate shall stay the Claim submittal and response process.
 2. If Owner and Contractor agree to mediation, then after 60 days from such agreement, either Owner or Contractor may unilaterally terminate the mediation process, and the Claim submittal and decision process shall resume as of the date of the termination. If the mediation proceeds but is unsuccessful in resolving the dispute, the Claim submittal and decision process shall resume as of the date of the conclusion of the mediation, as determined by the mediator.
 3. Owner and Contractor shall each pay one-half of the mediator's fees and costs.
- E. *Partial Approval:* If the party receiving a Claim approves the Claim in part and denies it in part, such action shall be final and binding unless within 30 days of such action the other party invokes the procedure set forth in Article 17 for final resolution of disputes.
- F. *Denial of Claim:* If efforts to resolve a Claim are not successful, the party receiving the Claim may deny it by giving written notice of denial to the other party. If the receiving party does not take action on the Claim within 90 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of the inaction, the Claim is deemed denied, thereby commencing the time for appeal of the denial. A denial of the Claim shall be final and binding unless within 30 days of the denial the other party invokes the procedure set forth in Article 17 for the final resolution of disputes.
- G. *Final and Binding Results:* If the parties reach a mutual agreement regarding a Claim, whether through approval of the Claim, direct negotiations, mediation, or otherwise; or if a Claim is approved in part and denied in part, or denied in full, and such actions become final and binding; then the results of the agreement or action on the Claim shall be incorporated in a Change Order to the extent they affect the Contract, including the Work, the Contract Times, or the Contract Price.

ARTICLE 13 – COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

13.01 *Cost of the Work*

- A. *Purposes for Determination of Cost of the Work:* The term Cost of the Work means the sum of all costs necessary for the proper performance of the Work at issue, as further defined below. The provisions of this Paragraph 13.01 are used for two distinct purposes:
1. To determine Cost of the Work when Cost of the Work is a component of the Contract Price, under cost-plus-fee, time-and-materials, or other cost-based terms; or
 2. To determine the value of a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price. When the value of any such adjustment is determined on the basis of Cost of the Work, Contractor is entitled only to those additional or incremental costs required because of the change in the Work or because of the event giving rise to the adjustment.
- B. *Costs Included:* Except as otherwise may be agreed to in writing by Owner, costs included in the Cost of the Work shall be in amounts no higher than those prevailing in the locality of the Project, shall not include any of the costs itemized in Paragraph 13.01.C, and shall include only the following items:
1. Payroll costs for employees in the direct employ of Contractor in the performance of the Work under schedules of job classifications agreed upon by Owner and Contractor. Such employees shall include, without limitation, superintendents, foremen, and other personnel employed full time on the Work. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits, which shall include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, bonuses, sick leave, and vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, shall be included in the above to the extent authorized by Owner.
 2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts shall accrue to Contractor unless Owner deposits funds with Contractor with which to make payments, in which case the cash discounts shall accrue to Owner. All trade discounts, rebates, and refunds and returns from sale of surplus materials and equipment shall accrue to Owner, and Contractor shall make provisions so that they may be obtained.
 3. Payments made by Contractor to Subcontractors for Work performed by Subcontractors. If required by Owner, Contractor shall obtain competitive bids from subcontractors acceptable to Owner and Contractor and shall deliver such bids to Owner, who will then determine, with the advice of Engineer, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee shall be determined in the same manner as Contractor's Cost of the Work and fee as provided in this Paragraph 13.01.
 4. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed for services specifically related to the Work.

5. Supplemental costs including the following:
- a. The proportion of necessary transportation, travel, and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.
 - b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of Contractor.
 - c. Rentals of all construction equipment and machinery, and the parts thereof, whether rented from Contractor or others in accordance with rental agreements approved by Owner with the advice of Engineer, and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the Work.
 - d. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable, as imposed by Laws and Regulations.
 - e. Deposits lost for causes other than negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.
 - f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by Contractor in connection with the performance of the Work (except losses and damages within the deductible amounts of property insurance established in accordance with Paragraph 6.05), provided such losses and damages have resulted from causes other than the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of Owner. No such losses, damages, and expenses shall be included in the Cost of the Work for the purpose of determining Contractor's fee.
 - g. The cost of utilities, fuel, and sanitary facilities at the Site.
 - h. Minor expenses such as communication service at the Site, express and courier services, and similar petty cash items in connection with the Work.
 - i. The costs of premiums for all bonds and insurance that Contractor is required by the Contract Documents to purchase and maintain.
- C. *Costs Excluded:* The term Cost of the Work shall not include any of the following items:
1. Payroll costs and other compensation of Contractor's officers, executives, principals (of partnerships and sole proprietorships), general managers, safety managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 13.01.B.1 or specifically covered by Paragraph 13.01.B.4. The payroll costs and other compensation excluded here are to be considered administrative costs covered by the Contractor's fee.

2. Expenses of Contractor's principal and branch offices other than Contractor's office at the Site.
 3. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.
 4. Costs due to the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.
 5. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraph 13.01.B.
- D. *Contractor's Fee*: When the Work as a whole is performed on the basis of cost-plus, Contractor's fee shall be determined as set forth in the Agreement. When the value of any Work covered by a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price is determined on the basis of Cost of the Work, Contractor's fee shall be determined as set forth in Paragraph 11.04.C.
- E. *Documentation*: Whenever the Cost of the Work for any purpose is to be determined pursuant to this Article 13, Contractor will establish and maintain records thereof in accordance with generally accepted accounting practices and submit in a form acceptable to Engineer an itemized cost breakdown together with supporting data.

13.02 Allowances

- A. It is understood that Contractor has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums and by such persons or entities as may be acceptable to Owner and Engineer.
- B. *Cash Allowances*: Contractor agrees that:
1. the cash allowances include the cost to Contractor (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and
 2. Contractor's costs for unloading and handling on the Site, labor, installation, overhead, profit, and other expenses contemplated for the cash allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment on account of any of the foregoing will be valid.
- C. *Contingency Allowance*: Contractor agrees that a contingency allowance, if any, is for the sole use of Owner to cover unanticipated costs.
- D. Prior to final payment, an appropriate Change Order will be issued as recommended by Engineer to reflect actual amounts due Contractor on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

13.03 Unit Price Work

- A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement.

- B. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Payments to Contractor for Unit Price Work will be based on actual quantities.
- C. Each unit price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item.
- D. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor. Engineer will review with Contractor the Engineer's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). Engineer's written decision thereon will be final and binding (except as modified by Engineer to reflect changed factual conditions or more accurate data) upon Owner and Contractor, subject to the provisions of the following paragraph.
- E. Within 30 days of Engineer's written decision under the preceding paragraph, Contractor may submit a Change Proposal, or Owner may file a Claim, seeking an adjustment in the Contract Price if:
 - 1. the quantity of any item of Unit Price Work performed by Contractor differs materially and significantly from the estimated quantity of such item indicated in the Agreement;
 - 2. there is no corresponding adjustment with respect to any other item of Work; and
 - 3. Contractor believes that it is entitled to an increase in Contract Price as a result of having incurred additional expense or Owner believes that Owner is entitled to a decrease in Contract Price, and the parties are unable to agree as to the amount of any such increase or decrease.

ARTICLE 14 – TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

14.01 Access to Work

- A. Owner, Engineer, their consultants and other representatives and personnel of Owner, independent testing laboratories, and authorities having jurisdiction will have access to the Site and the Work at reasonable times for their observation, inspection, and testing. Contractor shall provide them proper and safe conditions for such access and advise them of Contractor's safety procedures and programs so that they may comply therewith as applicable.

14.02 Tests, Inspections, and Approvals

- A. Contractor shall give Engineer timely notice of readiness of the Work (or specific parts thereof) for all required inspections and tests, and shall cooperate with inspection and testing personnel to facilitate required inspections and tests.
- B. Owner shall retain and pay for the services of an independent inspector, testing laboratory, or other qualified individual or entity to perform all inspections and tests expressly required by the Contract Documents to be furnished and paid for by Owner, except that costs incurred in connection with tests or inspections of covered Work shall be governed by the provisions of Paragraph 14.05.
- C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, Contractor shall assume full responsibility for arranging

and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish Engineer the required certificates of inspection or approval.

- D. Contractor shall be responsible for arranging, obtaining, and paying for all inspections and tests required:
1. by the Contract Documents, unless the Contract Documents expressly allocate responsibility for a specific inspection or test to Owner;
 2. to attain Owner's and Engineer's acceptance of materials or equipment to be incorporated in the Work;
 3. by manufacturers of equipment furnished under the Contract Documents;
 4. for testing, adjusting, and balancing of mechanical, electrical, and other equipment to be incorporated into the Work; and
 5. for acceptance of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work.

Such inspections and tests shall be performed by independent inspectors, testing laboratories, or other qualified individuals or entities acceptable to Owner and Engineer.

- E. If the Contract Documents require the Work (or part thereof) to be approved by Owner, Engineer, or another designated individual or entity, then Contractor shall assume full responsibility for arranging and obtaining such approvals.
- F. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by Contractor without written concurrence of Engineer, Contractor shall, if requested by Engineer, uncover such Work for observation. Such uncovering shall be at Contractor's expense unless Contractor had given Engineer timely notice of Contractor's intention to cover the same and Engineer had not acted with reasonable promptness in response to such notice.

14.03 Defective Work

- A. *Contractor's Obligation:* It is Contractor's obligation to assure that the Work is not defective.
- B. *Engineer's Authority:* Engineer has the authority to determine whether Work is defective, and to reject defective Work.
- C. *Notice of Defects:* Prompt notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor.
- D. *Correction, or Removal and Replacement:* Promptly after receipt of written notice of defective Work, Contractor shall correct all such defective Work, whether or not fabricated, installed, or completed, or, if Engineer has rejected the defective Work, remove it from the Project and replace it with Work that is not defective.
- E. *Preservation of Warranties:* When correcting defective Work, Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.
- F. *Costs and Damages:* In addition to its correction, removal, and replacement obligations with respect to defective Work, Contractor shall pay all claims, costs, losses, and damages arising out of or relating to defective Work, including but not limited to the cost of the inspection, testing, correction, removal, replacement, or reconstruction of such defective Work, fines levied against Owner by governmental authorities because the Work is

defective, and the costs of repair or replacement of work of others resulting from defective Work. Prior to final payment, if Owner and Contractor are unable to agree as to the measure of such claims, costs, losses, and damages resulting from defective Work, then Owner may impose a reasonable set-off against payments due under Article 15.

14.04 Acceptance of Defective Work

- A. If, instead of requiring correction or removal and replacement of defective Work, Owner prefers to accept it, Owner may do so (subject, if such acceptance occurs prior to final payment, to Engineer's confirmation that such acceptance is in general accord with the design intent and applicable engineering principles, and will not endanger public safety). Contractor shall pay all claims, costs, losses, and damages attributable to Owner's evaluation of and determination to accept such defective Work (such costs to be approved by Engineer as to reasonableness), and for the diminished value of the Work to the extent not otherwise paid by Contractor. If any such acceptance occurs prior to final payment, the necessary revisions in the Contract Documents with respect to the Work shall be incorporated in a Change Order. If the parties are unable to agree as to the decrease in the Contract Price, reflecting the diminished value of Work so accepted, then Owner may impose a reasonable set-off against payments due under Article 15. If the acceptance of defective Work occurs after final payment, Contractor shall pay an appropriate amount to Owner.

14.05 Uncovering Work

- A. Engineer has the authority to require special inspection or testing of the Work, whether or not the Work is fabricated, installed, or completed.
- B. If any Work is covered contrary to the written request of Engineer, then Contractor shall, if requested by Engineer, uncover such Work for Engineer's observation, and then replace the covering, all at Contractor's expense.
- C. If Engineer considers it necessary or advisable that covered Work be observed by Engineer or inspected or tested by others, then Contractor, at Engineer's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as Engineer may require, that portion of the Work in question, and provide all necessary labor, material, and equipment.
 - 1. If it is found that the uncovered Work is defective, Contractor shall be responsible for all claims, costs, losses, and damages arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and pending Contractor's full discharge of this responsibility the Owner shall be entitled to impose a reasonable set-off against payments due under Article 15.
 - 2. If the uncovered Work is not found to be defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Times, or both, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, then Contractor may submit a Change Proposal within 30 days of the determination that the Work is not defective.

14.06 Owner May Stop the Work

- A. If the Work is defective, or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, then Owner may order Contractor to stop

the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of Owner to stop the Work shall not give rise to any duty on the part of Owner to exercise this right for the benefit of Contractor, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

14.07 Owner May Correct Defective Work

- A. If Contractor fails within a reasonable time after written notice from Engineer to correct defective Work, or to remove and replace rejected Work as required by Engineer, or if Contractor fails to perform the Work in accordance with the Contract Documents, or if Contractor fails to comply with any other provision of the Contract Documents, then Owner may, after seven days written notice to Contractor, correct or remedy any such deficiency.
- B. In exercising the rights and remedies under this Paragraph 14.07, Owner shall proceed expeditiously. In connection with such corrective or remedial action, Owner may exclude Contractor from all or part of the Site, take possession of all or part of the Work and suspend Contractor's services related thereto, and incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere. Contractor shall allow Owner, Owner's representatives, agents and employees, Owner's other contractors, and Engineer and Engineer's consultants access to the Site to enable Owner to exercise the rights and remedies under this paragraph.
- C. All claims, costs, losses, and damages incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 14.07 will be charged against Contractor as set-offs against payments due under Article 15. Such claims, costs, losses and damages will include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of Contractor's defective Work.
- D. Contractor shall not be allowed an extension of the Contract Times because of any delay in the performance of the Work attributable to the exercise by Owner of Owner's rights and remedies under this Paragraph 14.07.

ARTICLE 15 – PAYMENTS TO CONTRACTOR; SET-OFFS; COMPLETION; CORRECTION PERIOD

15.01 Progress Payments

- A. *Basis for Progress Payments:* The Schedule of Values established as provided in Article 2 will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to Engineer. Progress payments on account of Unit Price Work will be based on the number of units completed during the pay period, as determined under the provisions of Paragraph 13.03. Progress payments for cost-based Work will be based on Cost of the Work completed by Contractor during the pay period.
- B. *Applications for Payments:*
 - 1. At least 20 days before the date established in the Agreement for each progress payment (but not more often than once a month), Contractor shall submit to Engineer for review an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, invoice, or other documentation warranting that Owner has received the materials and equipment free and clear of all Liens, and evidence that the materials and equipment are covered by

appropriate property insurance, a warehouse bond, or other arrangements to protect Owner's interest therein, all of which must be satisfactory to Owner.

2. Beginning with the second Application for Payment, each Application shall include an affidavit of Contractor stating that all previous progress payments received on account of the Work have been applied on account to discharge Contractor's legitimate obligations associated with prior Applications for Payment.
3. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.

C. *Review of Applications:*

1. Engineer will, within 10 days after receipt of each Application for Payment, including each resubmittal, either indicate in writing a recommendation of payment and present the Application to Owner, or return the Application to Contractor indicating in writing Engineer's reasons for refusing to recommend payment. In the latter case, Contractor may make the necessary corrections and resubmit the Application.
2. Engineer's recommendation of any payment requested in an Application for Payment will constitute a representation by Engineer to Owner, based on Engineer's observations of the executed Work as an experienced and qualified design professional, and on Engineer's review of the Application for Payment and the accompanying data and schedules, that to the best of Engineer's knowledge, information and belief:
 - a. the Work has progressed to the point indicated;
 - b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, the results of any subsequent tests called for in the Contract Documents, a final determination of quantities and classifications for Unit Price Work under Paragraph 13.03, and any other qualifications stated in the recommendation); and
 - c. the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe the Work.
3. By recommending any such payment Engineer will not thereby be deemed to have represented that:
 - a. inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in the Contract; or
 - b. there may not be other matters or issues between the parties that might entitle Contractor to be paid additionally by Owner or entitle Owner to withhold payment to Contractor.
4. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment, including final payment, will impose responsibility on Engineer:
 - a. to supervise, direct, or control the Work, or

- b. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or
 - c. for Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work, or
 - d. to make any examination to ascertain how or for what purposes Contractor has used the money paid on account of the Contract Price, or
 - e. to determine that title to any of the Work, materials, or equipment has passed to Owner free and clear of any Liens.
- 5. Engineer may refuse to recommend the whole or any part of any payment if, in Engineer's opinion, it would be incorrect to make the representations to Owner stated in Paragraph 15.01.C.2.
- 6. Engineer will recommend reductions in payment (set-offs) necessary in Engineer's opinion to protect Owner from loss because:
 - a. the Work is defective, requiring correction or replacement;
 - b. the Contract Price has been reduced by Change Orders;
 - c. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;
 - d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible; or
 - e. Engineer has actual knowledge of the occurrence of any of the events that would constitute a default by Contractor and therefore justify termination for cause under the Contract Documents.
- D. *Payment Becomes Due:*
 - 1. Ten days after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended (subject to any Owner set-offs) will become due, and when due will be paid by Owner to Contractor.
- E. *Reductions in Payment by Owner:*
 - 1. In addition to any reductions in payment (set-offs) recommended by Engineer, Owner is entitled to impose a set-off against payment based on any of the following:
 - a. claims have been made against Owner on account of Contractor's conduct in the performance or furnishing of the Work, or Owner has incurred costs, losses, or damages on account of Contractor's conduct in the performance or furnishing of the Work, including but not limited to claims, costs, losses, or damages from workplace injuries, adjacent property damage, non-compliance with Laws and Regulations, and patent infringement;
 - b. Contractor has failed to take reasonable and customary measures to avoid damage, delay, disruption, and interference with other work at or adjacent to the Site;
 - c. Contractor has failed to provide and maintain required bonds or insurance;
 - d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible;

- e. Owner has incurred extra charges or engineering costs related to submittal reviews, evaluations of proposed substitutes, tests and inspections, or return visits to manufacturing or assembly facilities;
 - f. the Work is defective, requiring correction or replacement;
 - g. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;
 - h. the Contract Price has been reduced by Change Orders;
 - i. an event that would constitute a default by Contractor and therefore justify a termination for cause has occurred;
 - j. liquidated damages have accrued as a result of Contractor's failure to achieve Milestones, Substantial Completion, or final completion of the Work;
 - k. Liens have been filed in connection with the Work, except where Contractor has delivered a specific bond satisfactory to Owner to secure the satisfaction and discharge of such Liens;
 - l. there are other items entitling Owner to a set off against the amount recommended.
2. If Owner imposes any set-off against payment, whether based on its own knowledge or on the written recommendations of Engineer, Owner will give Contractor immediate written notice (with a copy to Engineer) stating the reasons for such action and the specific amount of the reduction, and promptly pay Contractor any amount remaining after deduction of the amount so withheld. Owner shall promptly pay Contractor the amount so withheld, or any adjustment thereto agreed to by Owner and Contractor, if Contractor remedies the reasons for such action. The reduction imposed shall be binding on Contractor unless it duly submits a Change Proposal contesting the reduction.
 3. Upon a subsequent determination that Owner's refusal of payment was not justified, the amount wrongfully withheld shall be treated as an amount due as determined by Paragraph 15.01 C.1 and subject to interest as provided in the Agreement.

15.02 Contractor's Warranty of Title

- A. Contractor warrants and guarantees that title to all Work, materials, and equipment furnished under the Contract will pass to Owner free and clear of (1) all Liens and other title defects, and (2) all patent, licensing, copyright, or royalty obligations, no later than seven days after the time of payment by Owner.

15.03 Substantial Completion

- A. When Contractor considers the entire Work ready for its intended use Contractor shall notify Owner and Engineer in writing that the entire Work is substantially complete and request that Engineer issue a certificate of Substantial Completion. Contractor shall at the same time submit to Owner and Engineer an initial draft of punch list items to be completed or corrected before final payment.
- B. Promptly after Contractor's notification, Owner, Contractor, and Engineer shall make an inspection of the Work to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor in writing giving the reasons therefor.

- C. If Engineer considers the Work substantially complete, Engineer will deliver to Owner a preliminary certificate of Substantial Completion which shall fix the date of Substantial Completion. Engineer shall attach to the certificate a punch list of items to be completed or corrected before final payment. Owner shall have seven days after receipt of the preliminary certificate during which to make written objection to Engineer as to any provisions of the certificate or attached punch list. If, after considering the objections to the provisions of the preliminary certificate, Engineer concludes that the Work is not substantially complete, Engineer will, within 14 days after submission of the preliminary certificate to Owner, notify Contractor in writing that the Work is not substantially complete, stating the reasons therefor. If Owner does not object to the provisions of the certificate, or if despite consideration of Owner's objections Engineer concludes that the Work is substantially complete, then Engineer will, within said 14 days, execute and deliver to Owner and Contractor a final certificate of Substantial Completion (with a revised punch list of items to be completed or corrected) reflecting such changes from the preliminary certificate as Engineer believes justified after consideration of any objections from Owner.
- D. At the time of receipt of the preliminary certificate of Substantial Completion, Owner and Contractor will confer regarding Owner's use or occupancy of the Work following Substantial Completion, review the builder's risk insurance policy with respect to the end of the builder's risk coverage, and confirm the transition to coverage of the Work under a permanent property insurance policy held by Owner. Unless Owner and Contractor agree otherwise in writing, Owner shall bear responsibility for security, operation, protection of the Work, property insurance, maintenance, heat, and utilities upon Owner's use or occupancy of the Work.
- E. After Substantial Completion the Contractor shall promptly begin work on the punch list of items to be completed or corrected prior to final payment. In appropriate cases Contractor may submit monthly Applications for Payment for completed punch list items, following the progress payment procedures set forth above.
- F. Owner shall have the right to exclude Contractor from the Site after the date of Substantial Completion subject to allowing Contractor reasonable access to remove its property and complete or correct items on the punch list.

15.04 *Partial Use or Occupancy*

- A. Prior to Substantial Completion of all the Work, Owner may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which Owner, Engineer, and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by Owner for its intended purpose without significant interference with Contractor's performance of the remainder of the Work, subject to the following conditions:
 - 1. At any time Owner may request in writing that Contractor permit Owner to use or occupy any such part of the Work that Owner believes to be substantially complete. If and when Contractor agrees that such part of the Work is substantially complete, Contractor, Owner, and Engineer will follow the procedures of Paragraph 15.03.A through E for that part of the Work.
 - 2. At any time Contractor may notify Owner and Engineer in writing that Contractor considers any such part of the Work substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.

3. Within a reasonable time after either such request, Owner, Contractor, and Engineer shall make an inspection of that part of the Work to determine its status of completion. If Engineer does not consider that part of the Work to be substantially complete, Engineer will notify Owner and Contractor in writing giving the reasons therefor. If Engineer considers that part of the Work to be substantially complete, the provisions of Paragraph 15.03 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.
4. No use or occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of Paragraph 6.05 regarding builder's risk or other property insurance.

15.05 Final Inspection

- A. Upon written notice from Contractor that the entire Work or an agreed portion thereof is complete, Engineer will promptly make a final inspection with Owner and Contractor and will notify Contractor in writing of all particulars in which this inspection reveals that the Work, or agreed portion thereof, is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

15.06 Final Payment

A. Application for Payment:

1. After Contractor has, in the opinion of Engineer, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance, certificates of inspection, annotated record documents (as provided in Paragraph 7.11), and other documents, Contractor may make application for final payment.
2. The final Application for Payment shall be accompanied (except as previously delivered) by:
 - a. all documentation called for in the Contract Documents;
 - b. consent of the surety, if any, to final payment;
 - c. satisfactory evidence that all title issues have been resolved such that title to all Work, materials, and equipment has passed to Owner free and clear of any Liens or other title defects, or will so pass upon final payment.
 - d. a list of all disputes that Contractor believes are unsettled; and
 - e. complete and legally effective releases or waivers (satisfactory to Owner) of all Lien rights arising out of the Work, and of Liens filed in connection with the Work.
3. In lieu of the releases or waivers of Liens specified in Paragraph 15.06.A.2 and as approved by Owner, Contractor may furnish receipts or releases in full and an affidavit of Contractor that: (a) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (b) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which Owner might in any way be responsible, or which might in any way result in liens or other burdens on Owner's property, have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, Contractor may furnish a bond or other collateral satisfactory to Owner to indemnify Owner

against any Lien, or Owner at its option may issue joint checks payable to Contractor and specified Subcontractors and Suppliers.

B. *Engineer's Review of Application and Acceptance:*

1. If, on the basis of Engineer's observation of the Work during construction and final inspection, and Engineer's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, Engineer is satisfied that the Work has been completed and Contractor's other obligations under the Contract have been fulfilled, Engineer will, within ten days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of final payment and present the Application for Payment to Owner for payment. Such recommendation shall account for any set-offs against payment that are necessary in Engineer's opinion to protect Owner from loss for the reasons stated above with respect to progress payments. At the same time Engineer will also give written notice to Owner and Contractor that the Work is acceptable, subject to the provisions of Paragraph 15.07. Otherwise, Engineer will return the Application for Payment to Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application for Payment.

- C. *Completion of Work:* The Work is complete (subject to surviving obligations) when it is ready for final payment as established by the Engineer's written recommendation of final payment.
- D. *Payment Becomes Due:* Thirty days after the presentation to Owner of the final Application for Payment and accompanying documentation, the amount recommended by Engineer (less any further sum Owner is entitled to set off against Engineer's recommendation, including but not limited to set-offs for liquidated damages and set-offs allowed under the provisions above with respect to progress payments) will become due and shall be paid by Owner to Contractor.

15.07 *Waiver of Claims*

- A. The making of final payment will not constitute a waiver by Owner of claims or rights against Contractor. Owner expressly reserves claims and rights arising from unsettled Liens, from defective Work appearing after final inspection pursuant to Paragraph 15.05, from Contractor's failure to comply with the Contract Documents or the terms of any special guarantees specified therein, from outstanding Claims by Owner, or from Contractor's continuing obligations under the Contract Documents.
- B. The acceptance of final payment by Contractor will constitute a waiver by Contractor of all claims and rights against Owner other than those pending matters that have been duly submitted or appealed under the provisions of Article 17.

15.08 *Correction Period*

- A. If within one year after the date of Substantial Completion (or such longer period of time as may be prescribed by the terms of any applicable special guarantee required by the Contract Documents, or by any specific provision of the Contract Documents), any Work is found to be defective, or if the repair of any damages to the Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas used by Contractor as permitted by Laws and Regulations, is found to be defective, then Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:

1. correct the defective repairs to the Site or such other adjacent areas;
 2. correct such defective Work;
 3. if the defective Work has been rejected by Owner, remove it from the Project and replace it with Work that is not defective, and
 4. satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others, or to other land or areas resulting therefrom.
- B. If Contractor does not promptly comply with the terms of Owner's written instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others).
- C. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications.
- D. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this paragraph, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.
- E. Contractor's obligations under this paragraph are in addition to all other obligations and warranties. The provisions of this paragraph shall not be construed as a substitute for, or a waiver of, the provisions of any applicable statute of limitation or repose.

ARTICLE 16 – SUSPENSION OF WORK AND TERMINATION

16.01 Owner May Suspend Work

- A. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by written notice to Contractor and Engineer. Such notice will fix the date on which Work will be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be entitled to an adjustment in the Contract Price or an extension of the Contract Times, or both, directly attributable to any such suspension. Any Change Proposal seeking such adjustments shall be submitted no later than 30 days after the date fixed for resumption of Work.

16.02 Owner May Terminate for Cause

- A. The occurrence of any one or more of the following events will constitute a default by Contractor and justify termination for cause:
1. Contractor's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the Progress Schedule);
 2. Failure of Contractor to perform or otherwise to comply with a material term of the Contract Documents;

3. Contractor's disregard of Laws or Regulations of any public body having jurisdiction; or
 4. Contractor's repeated disregard of the authority of Owner or Engineer.
- B. If one or more of the events identified in Paragraph 16.02.A occurs, then after giving Contractor (and any surety) ten days written notice that Owner is considering a declaration that Contractor is in default and termination of the contract, Owner may proceed to:
1. declare Contractor to be in default, and give Contractor (and any surety) notice that the Contract is terminated; and
 2. enforce the rights available to Owner under any applicable performance bond.
- C. Subject to the terms and operation of any applicable performance bond, if Owner has terminated the Contract for cause, Owner may exclude Contractor from the Site, take possession of the Work, incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere, and complete the Work as Owner may deem expedient.
- D. Owner may not proceed with termination of the Contract under Paragraph 16.02.B if Contractor within seven days of receipt of notice of intent to terminate begins to correct its failure to perform and proceeds diligently to cure such failure.
- E. If Owner proceeds as provided in Paragraph 16.02.B, Contractor shall not be entitled to receive any further payment until the Work is completed. If the unpaid balance of the Contract Price exceeds the cost to complete the Work, including all related claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals) sustained by Owner, such excess will be paid to Contractor. If the cost to complete the Work including such related claims, costs, losses, and damages exceeds such unpaid balance, Contractor shall pay the difference to Owner. Such claims, costs, losses, and damages incurred by Owner will be reviewed by Engineer as to their reasonableness and, when so approved by Engineer, incorporated in a Change Order. When exercising any rights or remedies under this paragraph, Owner shall not be required to obtain the lowest price for the Work performed.
- F. Where Contractor's services have been so terminated by Owner, the termination will not affect any rights or remedies of Owner against Contractor then existing or which may thereafter accrue, or any rights or remedies of Owner against Contractor or any surety under any payment bond or performance bond. Any retention or payment of money due Contractor by Owner will not release Contractor from liability.
- G. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 6.01.A, the provisions of that bond shall govern over any inconsistent provisions of Paragraphs 16.02.B and 16.02.D.

16.03 Owner May Terminate For Convenience

- A. Upon seven days written notice to Contractor and Engineer, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. In such case, Contractor shall be paid for (without duplication of any items):
1. completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;
 2. expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents

- in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses; and
3. other reasonable expenses directly attributable to termination, including costs incurred to prepare a termination for convenience cost proposal.
- B. Contractor shall not be paid on account of loss of anticipated overhead, profits, or revenue, or other economic loss arising out of or resulting from such termination.

16.04 Contractor May Stop Work or Terminate

- A. If, through no act or fault of Contractor, (1) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (2) Engineer fails to act on any Application for Payment within 30 days after it is submitted, or (3) Owner fails for 30 days to pay Contractor any sum finally determined to be due, then Contractor may, upon seven days written notice to Owner and Engineer, and provided Owner or Engineer do not remedy such suspension or failure within that time, terminate the contract and recover from Owner payment on the same terms as provided in Paragraph 16.03.
- B. In lieu of terminating the Contract and without prejudice to any other right or remedy, if Engineer has failed to act on an Application for Payment within 30 days after it is submitted, or Owner has failed for 30 days to pay Contractor any sum finally determined to be due, Contractor may, seven days after written notice to Owner and Engineer, stop the Work until payment is made of all such amounts due Contractor, including interest thereon. The provisions of this paragraph are not intended to preclude Contractor from submitting a Change Proposal for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to Contractor's stopping the Work as permitted by this paragraph.

ARTICLE 17 – FINAL RESOLUTION OF DISPUTES

17.01 Methods and Procedures

- A. *Disputes Subject to Final Resolution:* The following disputed matters are subject to final resolution under the provisions of this Article:
1. A timely appeal of an approval in part and denial in part of a Claim, or of a denial in full; and
 2. Disputes between Owner and Contractor concerning the Work or obligations under the Contract Documents, and arising after final payment has been made.
- B. *Final Resolution of Disputes:* For any dispute subject to resolution under this Article, Owner or Contractor may:
1. elect in writing to invoke the dispute resolution process provided for in the Supplementary Conditions; or
 2. agree with the other party to submit the dispute to another dispute resolution process; or
 3. if no dispute resolution process is provided for in the Supplementary Conditions or mutually agreed to, give written notice to the other party of the intent to submit the dispute to a court of competent jurisdiction.

ARTICLE 18 – MISCELLANEOUS

18.01 Giving Notice

- A. Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if:
 - 1. delivered in person, by a commercial courier service or otherwise, to the individual or to a member of the firm or to an officer of the corporation for which it is intended; or
 - 2. delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the sender of the notice.

18.02 Computation of Times

- A. When any period of time is referred to in the Contract by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

18.03 Cumulative Remedies

- A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract. The provisions of this paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

18.04 Limitation of Damages

- A. With respect to any and all Change Proposals, Claims, disputes subject to final resolution, and other matters at issue, neither Owner nor Engineer, nor any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, shall be liable to Contractor for any claims, costs, losses, or damages sustained by Contractor on or in connection with any other project or anticipated project.

18.05 No Waiver

- A. A party's non-enforcement of any provision shall not constitute a waiver of that provision, nor shall it affect the enforceability of that provision or of the remainder of this Contract.

18.06 Survival of Obligations

- A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract, as well as all continuing obligations indicated in the Contract, will survive final payment, completion, and acceptance of the Work or termination or completion of the Contract or termination of the services of Contractor.

18.07 Controlling Law

- A. This Contract is to be governed by the law of the state in which the Project is located.

18.08 Headings

- A. Article and paragraph headings are inserted for convenience only and do not constitute parts of these General Conditions.

Supplementary Conditions

These Supplementary Conditions amend or supplement the Standard General Conditions of the Construction Contract, EJCDC® C-700 (2013 Edition). All provisions that are not so amended or supplemented remain in full force and effect.

The terms used in these Supplementary Conditions have the meanings stated in the General Conditions. Additional terms used in these Supplementary Conditions have the meanings stated below, which are applicable to both the singular and plural thereof.

The address system used in these Supplementary Conditions is the same as the address system used in the General Conditions, with the prefix "SC" added thereto.

TABLE OF CONTENTS

	Page
ARTICLE 1 – DEFINITIONS AND TERMINOLOGY	
SC- 1.01 Defined Terms	1
ARTICLE 2 – PRELIMINARY MATTERS	
SC- 2.02 Copies of Documents	2
ARTICLE 4 – commencement and progress of the work	
SC- 4.05 Delays in Contractor's Progress	2
ARTICLE 5 – AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS	
SC- 5.02 Use of Site and Other Areas	3
SC- 5.03 Subsurface and Physical Conditions	5
SC- 5.06 Hazardous Environmental Conditions	5
ARTICLE 6 – BONDS AND INSURANCE	
SC- 6.02 Insurance – General Provisions	5
SC- 6.03 Contractor's Liability Insurance	5
SC- 6.04 Owner's Liability Insurance	7
SC- 6.05 Property Insurance	7
SC- 6.06 Waiver of Rights	9

ARTICLE 7 – CONTRACTOR’S RESPONSIBILITIES

SC- 7.02 Labor; Working Hours	9
SC- 7.03 Service, Materials, and Equipment	9
SC- 7.08 Permits	10
SC- 7.12 Safety and Protection	10

ARTICLE 8 – other work at the site

SC- 8.03 Legal Relationships	11
------------------------------------	----

ARTICLE 9 – OWNER’S RESPONSIBILITIES

SC- 9.13 Owner’s Site Representative	11
--	----

ARTICLE 10 – ENGINEER’S STATUS DURING CONSTRUCTION

SC- 10.03 Project Representative	10
--	----

ARTICLE 13 – COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

SC- 13.03 Unit Price Work	10
---------------------------------	----

ARTICLE 15 – PAYMENTS TO CONTRACTOR; SET-OFFS; COMPLETION; CORRECTION PERIOD

SC- 15.01 Progress Payments	11
SC- 15.03 Substantial Completion	11
SC- 15.03 Final Payment	11

ARTICLE 17 – FINAL RESOLUTION OF DISPUTES..... 11

Contract - Bid 21-50
Tanglewood Branch Restoration
Appendix A - City Bid Package

ARTICLE 1 – DEFINITIONS AND TERMINOLOGY

SC-1.01 *Defined Terms*

The terms used in the Supplementary Conditions which are defined in the Standard General Conditions of the Construction Contract (No. 00700, 2001 Edition) have the meanings assigned to them in the General Conditions. In addition to the provisions of paragraph 1.01, the following supplemental definitions apply:

28. *Owner* – The City of Fayetteville, AR acting through its duly authorized representatives.

Add the following definitions to Paragraph 1.01 of the General Conditions:

49. *Advertisement* - The legal publications pertaining to the work of this contract.
50. *Geotechnical Baseline Report (GBR)* — The interpretive report prepared by or for Owner regarding subsurface conditions at the Site, and containing specific baseline geotechnical conditions that may be anticipated or relied upon for bidding and contract administration purposes, subject to the controlling provisions of the Contract, including the GBR's own terms. The GBR is a Contract Document.
51. *Geotechnical Data Report (GDR)* — The factual report that collects and presents data regarding actual subsurface conditions at or adjacent to the Site, including Technical Data and other geotechnical data, prepared by or for Owner in support of the Geotechnical Baseline Report. The GDR's content may include logs of borings, trenches, and other site investigations, recorded measurements of subsurface water levels, the results of field and laboratory testing, and descriptions of the investigative and testing programs. The GDR does not include an interpretation of the data. If opinions, or interpretive or speculative non-factual comments or statements appear in a document that is labeled a GDR, such opinions, comments, or statements are not operative parts of the GDR and do not have contractual standing. Subject to that exception, the GDR is a Contract Document.
52. *Grade* - The established elevations of the subgrade, base, top of curb and paving; flow lines of storm and sanitary sewers and other appurtenances; etc. as shown on the Drawings."
53. *Plans* - Collectively, all of the Drawings pertaining to the contract and made a part thereof, and also such supplementary drawings as Engineer may issue from time to time in order to clarify the Drawings, or for the purpose of showing changes in the work as authorized under the General Requirements, or for the showing of details which are not shown thereon.

54. *Surety or Sureties* - A bondsmen or party or parties who have made the fulfillment of the contract by Bonds, and whose signatures are attached to such Bonds.
55. *Liquidated Damages* – The fixed amount by which a party to an agreement promises to pay to the other, in case he shall not fulfill some primary or principal engagement into which he has entered by the same agreement; it differs from a penalty.
56. *Davis-Bacon* – Term used for the United States Department of Labor Davis-Bacon and Related Acts. These acts apply to contractors and subcontractors performing on federally funded or assisted contracts in excess of \$2,000 for the construction, alteration, or repair (including painting and decorating) of public buildings or public works. Contractors and subcontractors must pay their laborers and mechanics employed under the contract no less than the locally prevailing wages and fringe benefits for corresponding work on similar projects in the area. The Department of Labor determines such locally prevailing wage rates.
57. *Business License* – a permit issued by a government agency that allows individuals or companies to conduct business within the government's geographical jurisdiction.

ARTICLE – PRELIMINARY MATTERS

SC-2.02 *Copies of Documents*

SC-2.02 Delete Paragraph 2.02.A in its entirety and insert the following in its place:

- A. Owner shall furnish to Contractor one (1) hardcopy of the executed Contract Documents incorporating and integrating all Addenda and any amendments negotiated prior to the Effective Date of the Contract (including one fully executed counterpart of the Agreement), and one (1) copy in electronic portable document format (PDF). Additional printed copies of the executed Contract Documents will be furnished upon request at the cost of reproduction.

ARTICLE 4 – COMMENCEMENT AND PROGRESS OF THE WORK

SC-4.05 *Delays in Contractor's Progress*

SC-4.05 Amend Paragraph 4.05.C.2 to read:

2. "Weather-Related Events in excess of the normal amount of Weather-Related Events as provided in SC-4.05.H."

SC-4.05 Insert the following Paragraphs after Paragraph 4.05G:

- H. Calendar day contract time includes delays for normal weather-related events, such as rain, snow, and freezing temperatures that may affect the progress of the construction in the following amounts on a per-month basis as hereinafter set out. Only weather-related delays in excess of these amounts will be considered for time extensions, if

requested by the Contractor. Days Included in Contract Times for Normal Weather-Related Events are (on a monthly basis):

<u>Month</u>	<u>Normal Weather-Related Events</u>
<u>January</u>	<u>6</u>
<u>February</u>	<u>5</u>
<u>March</u>	<u>4</u>
<u>April</u>	<u>4</u>
<u>May</u>	<u>4</u>
<u>June</u>	<u>3</u>
<u>July</u>	<u>3</u>
<u>August</u>	<u>3</u>
<u>September</u>	<u>2</u>
<u>October</u>	<u>4</u>
<u>November</u>	<u>3</u>
<u>December</u>	<u>6</u>

A working day is considered 60% of the contractors work force working at least 50% of the work day."

- I. See SC 7.02.C for clarification of non-work days.

ARTICLE 5 – AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS

SC-5.02 *Use of Site and Other Areas*

SC-5.02.C Add the following new paragraph immediately after Paragraph 5.02.C:

The Contractor shall also return all grading as required and complete the placing of topsoil and sod or seed as directed by the Engineer or Owner. Refer to the Standard Specifications for the installation and maintenance of topsoil, sod or seed.

SC-5.02.E Add the following new paragraph immediately after Paragraph 5.02.D:

E. Public Convenience: During the progress of the Work the convenience of the local public, businesses and residents along the Work shall be considered and, where

possible, their rights of access shall be preserved. Temporary driveways, approaches, and crossings shall be provided where practical and maintained in good and safe condition. Access shall be maintained to businesses at all times during their hours of operation. Construction materials shall be stored or stockpiled as to cause as little obstruction as possible and still be readily accessible for use or inspection. No material shall be stored within 5 feet of any tree or building nor within 10 feet of any fire hydrant; fire hydrants shall always remain accessible and ready for immediate use by the fire department.

SC-5.02.F Add the following new paragraph immediately after Paragraph 5.02.E:

F. Dust, Mud, Drainage, and Erosion Control: For all sites one (1) acre and larger, minimum erosion control measures shall be conducted.

The Contractor shall make all necessary precautions and measures necessary to prevent generation of unnecessary dust or mud and the accumulation of dust or mud on vegetation, structures, streets, parking lots or other areas which may be affected. Earth surfaces shall be kept moist with water or by application of a safe chemical dust suppressant.

The Contractor shall provide for the drainage of storm water and such water as may be applicable or discharged on the site during performance of the Contract. All existing drainage channels or conduits shall be cleaned, enlarged, or supplemented as necessary to carry all increased run-off attributed to the Contractor's operations.

The Contractor shall prevent erosion of soil on the site and adjacent property resulting from their construction activities. Effective measures shall be initiated prior to the commencement of clearing, grading, excavation, or other operations.

The site shall be kept clean and orderly, all debris cleaned up at least once at the end of the day and any the road shall be kept clean of any mud or debris.

SC-5.02.G Add the following new paragraph immediately after Paragraph 5.02.F:

G. Tree and Plant Protection: The Contractor shall prevent the destruction of all trees and other vegetation along the course of the work to be performed under this Contract. No trees or cultured plants shall be removed unless their removal is directed by Owner, Engineer, or the Engineer's representative. Furthermore, all trimming and repair of trees and plants shall be performed by qualified nurserymen or horticulturists. No trimming shall be performed with anything other than approved implements; no earth-moving equipment shall be used.

SC-5.03 *Subsurface and Physical Conditions*

A. No reports of explorations or tests of subsurface conditions at or adjacent to the Site, or drawings of physical conditions relating to existing surface or subsurface structures at the Site, are known to Owner.

SC-5.06 *Hazardous Environmental Conditions*

A. No reports or drawings related to Hazardous Environmental Conditions at the Site are known to Owner.

B. Not Used.

SC 5.06 Delete Paragraph 5.06.I in its entirety.

SC 5.06 Add the following to the end of Paragraph 5.06.J:

**Contractor acknowledges that the Owner is entitled to tort immunity under
A.C.A. 21-9-301**

ARTICLE 6 – BONDS AND INSURANCE

SC-6.02 Insurance – General Provisions

SC 6.02 Paragraph 6.02.B is modified to remove the words “Owner or”.

SC 6.02 Delete Paragraph 6.02.D in its entirety.

SC 6.02 Delete Paragraph 6.02.H in its entirety and insert the following in its place:

H. Without prejudice to any other right or remedy, if the Contractor has failed to obtain required insurance, the Owner may elect to obtain equivalent insurance to protect the Owner’s interests at the expense of the Contractor who was required to provide such coverage, and the Contract Price shall be adjusted accordingly.

SC-6.03 Contractor’s Liability Insurance

SC 6.03 Delete the word “Blanket” from Paragraph 6.03.C.2.

SC 6.03 Add the following sentence to the end of Paragraph 6.03.C.4:

Cross liability is specifically not excluded.

SC 6.03 Delete the words “or equivalent” from the end of Paragraph 6.03.C.7 and substitute the following in its place:

“ISO Endorsement CG 20 38 (Additional Insured – Automatic)”

SC 6.03 Delete the words “Automobile Liability” from Paragraph 6.03.D and substitute the following in its place:

“Business Auto Coverage”

SC 6.03 Add the following new paragraph immediately after Paragraph 6.03.J:

K. The limits of liability for the insurance required by Paragraph 6.03 of the General Conditions shall provide coverage for not less than the following amounts or greater where required by Laws and Regulations:

1. Workers’ Compensation, and related coverages under Paragraphs 6.03.A.1 and A.2 of the General Conditions:

State: Statutory

Federal, if applicable (e.g., Longshoreman’s): Statutory

Employer’s Liability:

Bodily injury, by Accident	<u>\$500,000 Each Accident</u>
Bodily Injury by Disease	<u>\$500,000 Policy Limit</u>
Bodily Injury by Disease	<u>\$500,000 Each Employee</u>

2. Contractor's Commercial General Liability under Paragraphs 6.03.B and 6.03.C of the General Conditions:

General Aggregate \$ 2,000,000.00

Products - Completed Operations Aggregate \$ 2,000,000.00

Personal and Advertising Injury \$ 1,000,000.00

Each Occurrence (Bodily Injury and Property Damage) \$ 1,000,000.00

3. Business Auto Coverage under Paragraph 6.03.D. of the General Conditions:

Combined Single Limit of \$ 1,000,000.00

4. Excess or Umbrella Liability:

Per Occurrence \$ 2,000,000

General Aggregate \$ 2,000,000

5. Railroad Protective Insurance (if applicable):

As directed by AR &
\$ MO Railroad

6. Additional Insureds: In addition to Owner and Engineer, include as additional insureds the following:

7. Contractor's Professional Liability:

Each Claim \$ \$1,000,000

Annual Aggregate \$ \$1,000,000

☐ If box is checked, Contractor is not required to provide Contractor's Professional Liability insurance under this Contract

SC-6.04 *Owner's Liability Insurance*

SC-6.04 Delete Section 6.04 of the general conditions and substitute the following in its place:

This is a MODIFIED version of EJCDC® C-800, Supplementary Conditions.
Copyright © 2013 by the National Society of Professional Engineers, American Council of Engineering Companies,
and American Society of Civil Engineers or is based in part on excerpts from EJCDC documents. Those portions of text that originated in
published EJCDC documents remain subject to the copyright.

CONTRACTOR shall indemnify and hold harmless OWNER and ENGINEER and their agents and employees from and against all losses and claims, demands, payments, suits, actions, recoveries, judgments of every nature and description brought or recovered against them by reason of omission or act of CONTRACTOR, his agent(s), employees, Subcontractor, Supplier, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, in the execution of the Work or guarding of it. CONTRACTOR shall obtain in the name of OWNER and ENGINEER (either as co-insured or by endorsement), and shall maintain and pay the premiums for such insurance in than amount not less than \$1,000,000.00 for property damage and bodily injury limits, and with such provisions as shall protect OWNER and ENGINEER from contingent liability under this contract.

SC-6.05

Property Insurance

SC-6.05.A. Delete Paragraph 6.05.A in its entirety and insert the following in its place:

- A. Contractor shall purchase and maintain property insurance upon the Work at the Site in the amount of the initial Contract Sum, plus value of subsequent Contract modifications and cost of materials supplied or installed by others, comprising total value for the entire Project at the site on a replacement cost basis. Contractor shall be responsible for any deductible or self-insured retention. This insurance shall:
1. include the interests of Owner, Contractor, Subcontractors, Engineer, and *[here identify by name (not genre) any other individuals or entities to be listed as loss payees]*;
 2. be written on a Builder's Risk "all-risk" or equivalent policy form that shall at least include insurance for physical loss and damage to the Work, temporary buildings, falsework, and materials and equipment in transit and shall include, without limitation, insurance against the following perils or causes of loss: flood, fire, lightning, extended coverage, theft, vandalism and malicious mischief, earthquake, collapse, debris removal, demolition occasioned by enforcement of Laws and Regulations, water damage (other than that caused by flood), and such other perils or causes of loss as may be specifically required by these Supplementary Conditions.
 3. include expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects);
 4. cover materials and equipment stored at the Site or at another location that was agreed to in writing by Owner prior to being incorporated in the Work, provided that such materials and equipment have been included in an Application for Payment recommended by Engineer;
 5. allow for partial utilization of the Work by Owner;
 6. include testing and startup;

7. be maintained in effect until final payment is made unless otherwise agreed to in writing by Owner, Contractor, and Engineer with 30 days written notice to each other loss payee to whom a certificate of insurance has been issued; and
8. comply with the requirements of Paragraph 6.05.C of the General Conditions.
9. specify that insurance provided by Contractor will be considered primary and not contributory to any other insurance available to Owner or Engineer.

SC-6.05.B. Delete paragraph 6.05.B of the General Conditions in its entirety and insert the following in its place:

- B. All policies will provide for 30 days written notice (certified mail shall be required) prior to any cancellation or non-renewal of insurance policies required under the Contract. Any such wording as "will endeavor" or "but failure to mail such notice shall impose no obligation or liability of any kind upon the Company..." shall be deleted from the policies and certificates.

SC-6.05.E. Delete paragraph 6.05.E of the General Conditions in its entirety and insert the following in its place:

- E. Contractor shall protect Owner against all loss during the course of the contract. If, due to the nature of the Project, insurance coverage other than that specified is needed by Contractor to protect Owner against all losses, Contractor shall be responsible for the determination of and procurement of any additional insurance needed.

SC-6.06 Waiver of Rights

SC-6.06.A. Delete Paragraph 6.06.A in its entirety.

SC-6.06.B. Delete Paragraph 6.06.B in its entirety.

SC-6.06.C. Delete Paragraph 6.06.C in its entirety.

SC-6.07 Receipt and Application of Property Insurance Proceeds

SC 6.07 Delete the words "the dispute resolution provisions of this Contract or" from Paragraph 6.07.B.

ARTICLE 7 – CONTRACTOR'S RESPONSIBILITIES

SC-7.02 Labor, Working Hours

SC-7.02.B. Add the following new subparagraphs immediately after Paragraph 7.02.B:

1. Regular working hours will be 8:00 am – 8:00 pm.
2. Owner's legal holidays are: *New Year's Day, Presidents Day, Memorial Day, Independence Day, Labor Day, Veterans Day, Thanksgiving Day, the Day after Thanksgiving, Christmas Eve, and Christmas Day. When a holiday falls on a*

Saturday, it will be observed on the preceding Friday. When a holiday falls on a Sunday, it will be observed on the following Monday.

3. For a calendar day contract, Saturday, Sunday and legal holidays shall be considered as included in the contract time.

SC-7.02.C. Add the following new paragraph immediately after Paragraph 7.02.B:

- C. For a calendar day contract, weather-related events as described in 4.05.H shall not be considered for Saturdays, Sundays or legal holidays unless specific written approval was granted beforehand. Special consideration may be given for weather-related events whose duration exceeds seven (7) consecutive days.
- D. *Davis-Bacon Act requirements for employee compensation shall apply to this contract.*

SC-7.03 *Service, Materials, and Equipment*

SC-7.03.B. Add the following new subparagraph immediately after Paragraph 7.02.B:

All salvaged materials not the property of other parties shall remain the property of the Owner unless otherwise provided for in the detailed specifications. The Contractor shall handle, transport, and store such salvaged materials at designated points or locations at no additional cost to the Owner. The Contractor shall be responsible for the care and protection of such materials until delivered to the designated location or installed in the new work when so specified, and shall make good any losses occasioned by damage, theft, or misappropriation while the materials are on the Work Site or en route to place of storage.

SC-7.07 *Patent Fees and Royalties*

SC 7.07 Delete the word "attorneys" from Paragraph 7.07.B and add the following sentence to the end of Paragraph 7.07.B:

Owner reserves the right to provide legal representation for the contractor in the event of legal action relevant to this subsection. Only if Owner waives its right to provide its choice of attorneys will the Owner be responsible for the Contractor's attorney fees for any dispute arising under this subsection only.

SC-7.08 *Permits*

SC-7.08.B. Add the following new subparagraph immediately after Paragraph 7.08.A:

1. All contractors and subcontractors are required to obtain a license from the State of Arkansas Contractors Licensing prior to commencing, engaging or carrying on any of the work.

SC-7.12 *Safety and Protection*

SC-7.12.C Delete Paragraph 7.12.C in its entirety and insert the following in its place:

In order to protect persons from injury and to avoid property damage, the Contractor shall provide adequate barricades, construction signs, lights, guards, flagging, and watchmen during the course of the construction work until it is safe for traffic or the public to use the roadway or other area freely and safely. All open trenches or other

excavations shall have such protection. Trenches left open shall be fenced, plated and/or barricaded at all times when construction is not taking place.

Materials stored upon or alongside public property, streets, roads, and highways shall be so placed, and the Work at all times shall be so conducted, as to cause the minimum obstruction and inconvenience to the public. Execution of all safety provisions is the sole responsibility of the Contractor.

SC-7.12.E Insert the following after Paragraph 7.12.E:

It is understood that all measures for protection of the Site, the Work, materials stored, Contractor's equipment, and existing facilities against vandalism and theft is solely the Contractor's responsibility and that no claim shall be brought against the Owner and Engineer for such damage or loss.

ARTICLE 8 – OTHER WORK AT THE SITE

SC-8.03 Legal Relationships

SC-8.03 Delete Paragraph 8.03.A in its entirety.

ARTICLE 9 – OWNER'S RESPONSIBILITIES

ARTICLE 10 – ENGINEER'S STATUS DURING CONSTRUCTION

SC-10.03 Project Representative

SC-10.03 Add the following new paragraphs immediately after Paragraph 10.03.A:

- B. On this Project Owner/Engineer will not furnish a Resident Project Representative to represent Engineer at the Site or assist Engineer in observing the progress and quality of the Work.

ARTICLE 13 – COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

SC-13.03 Unit Price Work

SC 13.03.E Delete Paragraph 13.03.E in its entirety and insert the following in its place:

- E. The unit price of an item of Unit Price Work shall be subject to reevaluation and adjustment under the following conditions:
1. if the extended price of a particular item of Unit Price Work amounts to 25 percent or more of the Contract Price (based on estimated quantities at the time of Contract formation) and the variation in the quantity of that particular item of Unit Price Work actually furnished or performed by Contractor differs by more than 25 percent from the estimated quantity of such item indicated in the Agreement; and
 2. if there is no corresponding adjustment with respect to any other item of Work; and

3. if Contractor believes that Contractor has incurred additional expense as a result thereof, Contractor may submit a Change Proposal, or if Owner believes that the quantity variation entitles Owner to an adjustment in the unit price, Owner may make a Claim, seeking an adjustment in the Contract Price.

ARTICLE 15 – PAYMENTS TO CONTRACTOR; SET-OFFS; COMPLETION; CORRECTION PERIOD

SC-15.01 Progress Payments

SC 15.01.D Delete Paragraph 15.01.D.1 in its entirety and insert the following in its place:

1. Thirty (30) days after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended (subject to any Owner set-offs) will become due, and when due will be paid by Owner to contractor.

SC-15.03 Substantial Completion

SC 15.03.B Add the following new subparagraph to Paragraph 15.03.B:

1. If some or all of the Work has been determined not to be at a point of Substantial Completion and will require re-inspection or re-testing by Engineer, the cost of such re-inspection or re-testing, including the cost of time, travel and living expenses, shall be paid by Contractor to Owner. If Contractor does not pay, or the parties are unable to agree as to the amount owed, then Owner may impose a reasonable set-off against payments due under Article 15.

SC-15.06 Final Payment

SC 15.06.A.1. Add the following new subparagraph to Paragraph 15.06.A.1.:

- a. A one (1) year maintenance bond is required to be provided with the final application for payment that is equal to 50% of the final contract amount.

ARTICLE 17 – FINAL RESOLUTION OF DISPUTES

SC-17.01 Methods and Procedures

SC-17.01 Delete Paragraph 17.01 in its entirety.

ARTICLE 18 – MISCELLANEOUS

SC-18.09 Add the following new paragraph:

18.09 Jurisdiction and Venue

The parties agree that proper jurisdiction and venue for any cause of action arising from this Agreement shall be vested in the Circuit Court of Washington County, Arkansas.

SC-18.10 Add the following new items:

- A. *Burning and Blasting: No burning nor blasting shall be permitted for this project.*

General Specifications for Stream Restoration

Tanglewood Branch Channel Restoration and Aquatic
Habitat Improvement Project

Prepared by:

Watershed Conservation Resource Center

August 9, 2021

Table of Contents

1.00	Unit Prices
2.00	Material Storage and Handling Requirements
3.00	Temporary Environmental Controls
4.00	Field Engineering
5.00	Site Preparation
6.00	Site Work
7.00	Site Finishing
8.00	Stream or River Channel and Floodplain Excavation
9.00	Soil Mattresses
10.00	Sod Mats
11.00	Rock Riffle Grade Control and Boulder Clusters
12.00	Stacked Rock
13.00	Streambank Filling, Grading, and Shaping
14.00	Stone and Rock Revetment
15.00	Concrete and Asphalt Removal
16.00	Materials and Procurement Items

Contract - Bid 21-50
Tanglewood Branch Restoration
Appendix A - City Bid Package

1.00 UNIT PRICES

Part 1 - GENERAL

1.10 SECTION INCLUDES

- A. Delineation of measurement and payment criteria applicable to Unit Price Work, whether the unit price items are part of a unit price contract or are part of a Stipulated Price contract.
- B. Defect assessment and non-payment for rejected work.

1.11 AUTHORITY

- A. Measurement methods are delineated for each individual bid item, or for groups of similar items, under this section.
- B. The **ENGINEER** will take all measurements and compute quantities accordingly.
- C. Assist by providing necessary equipment, workers, and survey personnel as required.

1.12 UNIT QUANTITIES SPECIFIED

- A. Quantities and measurements indicated in the Bid Form are for bidding and contract purposes only. Quantities and measurements supplied or placed in the Work and verified by **ENGINEER** shall determine payment except those items of work that will be paid based on plan quantities.
- B. If the actual Work requires more or fewer quantities than those quantities indicated, provide the required quantities at the unit prices contracted.

1.13 MEASUREMENT OF QUANTITIES

- A. Measurement by Weight: Items measured by weight will use specified standard handbook weights unless otherwise specified in this section for an individual item.
- B. Measurement by Volume: Measured by cubic dimension using mean length, width and height or thickness with survey chain or a steel tape.
- C. Measurement by Area: Measured by square dimension using mean length and width or radius with survey chain or steel tape.
- D. Linear Measurement: Measured by linear dimension at the item centerline or mean chord with survey chain or steel tape.
- E. Individual Item Measurement: Items to be paid for "each" unit furnished and installed shall be counted by the Project Manager.
- F. Planned Quantity: measurement is based on quantity specified in drawings and does not need to be measured again.

1.14 PAYMENT

- A. Payment Includes: Full compensation for required labor, products, tools, equipment, fuel, plants, transportation, services and incidentals; erection, application or installation of an item of the Work; overhead and profit.
- B. Final payment for Work governed by unit prices will be made on the basis of the actual measurements and quantities accepted by the **ENGINEER** multiplied by the unit price for Work which is incorporated in or made necessary by the Work.

1.15 DEFECT ASSESSMENT

- A. Replace the Work, or portions of the Work, not conforming to specified requirements.
- B. If, in the opinion of the **ENGINEER**, it is not practical to remove and replace the Work, the **ENGINEER** will direct that the defective Work will be repaired to the satisfaction of the **ENGINEER**, and the unit price will be adjusted to a new price at the discretion of the **ENGINEER**.
- C. The authority of the **ENGINEER** to assess the defect and identify payment adjustment is final.

1.16 NON-PAYMENT FOR REJECTED PRODUCTS

- A. Payment will not be made for any of the following:
 - 1. Products wasted or disposed of in a manner that is not acceptable.
 - 2. Products determined as unacceptable before or after placement.
 - 3. Products not completely unloaded from the transporting vehicle.
 - 4. Products placed beyond the lines, levels or boundaries of the required Work.
 - 5. Products remaining on hand after completion of the Work.
 - 6. Loading, hauling and disposing of rejected Products.

1.17 INCIDENTAL ITEMS

- A. General - Items indicated as incidental to a particular payment item are considered an integral part of that payment item and will not be measured or considered in determining payments.
- B. Safety - Safety is considered as incidental to every payment item, except for excavation safety, which is a separate bid item.
- C. Testing - Testing of installed work required by the specifications to be completed by the **CONTRACTOR** is incidental to any item included in the unit or system being tested. Retesting after corrective action to Work initially found to be defective is incidental to the item.
- D. Excess excavation - Excess excavation is generally incidental to the payment item, except where the **ENGINEER** has indicated that an excavation be expanded due to subsurface conditions.

- E. Miscellaneous - Clean-up, project closeout, project record documents, and all costs not directly mentioned in this section are considered as incidental to the Work.

1.18 PAYMENT ITEMS - NOT INCLUDED IN INDIVIDUAL SPECIFICATION SECTIONS

A. Mobilization (Pay Item 1)

1. Description - The preparatory work and operations, including, but not limited to, those necessary for the movement of personnel, equipment, supplies, trash receptacles and incidentals to the project site; for the establishment of the **CONTRACTOR's** offices, buildings, and other facilities necessary to undertake the work on the project. This item shall also include other work and operations that must be performed, or for expenses incurred, before beginning work on the various Contract items on the project site. **In no case shall the amount bid for the item of "Mobilization" exceed 5% of the total contract amount for all other items listed in the proposal.**
2. Incidental Items - It shall also include pre-construction costs which are necessary direct costs to the project and are of a general nature rather than directly attributable to other pay items under the Contract.
3. Related Items – Section 3 Site Preparation.
4. Units and Measurement - Paid as lump sum.
5. Partial Payment Provisions – Allowable partial payments will be based on the percentage of the original Contract earned exclusive of the item of Mobilization according to the following schedule:

Percentage of Original
Contract Amount Earned

Percentage of Bid Price
for Mobilization Allowed

First Progress Estimate

25

10

50

25

100

Part 2 – PRODUCTS

Not used.

Part 3 – EXECUTION

Not used.

2.00 MATERIAL STORAGE AND HANDLING REQUIREMENTS

Part 1 - GENERAL

2.10 SUMMARY

- A. Protect materials scheduled for use in the Work by means including, but not necessarily limited to, those described in this Section.
- B. Related work:
 - 1. Documents affecting work of this Section include, but are not limited to, General Conditions, Supplementary Conditions, and specifications make in Section 2 – General Requirements.
 - 2. Additional procedures also may be prescribed in other Sections of these Specifications.

2.11 QUALITY ASSURANCE

- A. The **CONTRACTOR**'s procedures and operations shall assure full protection of work and materials

2.12 STORAGE

- A. Materials, supplies and equipment shall be stored in an orderly fashion at the site of the work as will not unduly interfere with the progress of his work or of other contractors.

2.13 PROTECTION

- A. Provide the necessary care in unloading procedures to prevent damage to materials and equipment delivered to the job site.
- B. Maintain necessary security fencing and measures to prevent damage through vandalism or theft.
- C. At all times safely guard the **OWNER'S** property from injury or loss in connection with this Contract. At all times safely guard and protect the Work, and that of adjacent property, from damage. Maintain and use such equipment as may be necessary to protect adjacent property from damage caused by construction equipment, dust, mud, dirt, and refuse from operations. Failure to prevent such damage shall be cause for stopping the Work until dust, mud, dirt, and refuse are controlled. Be fully responsible for safety precautions and protection until acceptance of the Work.
- D. Exercise due care to avoid damage to existing improvements or facilities, fences, building, structures, adjacent properties, and trees and shrubs that are not to be removed.
- E. In the event of temporary suspension of work, or during inclement weather, or whenever the **ENGINEER** shall direct **CONTRACTORS** to carefully protect the Work and materials against damages or injury from the weather.

2.14 REPAIRS AND REPLACEMENTS

- A. In event of damage, promptly make replacements and repairs to the approval of the **ENGINEER** and at no additional cost to the **ENGINEER**.
- B. Additional time required to secure replacements and to make repairs will not be considered by Project Manager to justify an extension in the Contract Times.

Part 2 – PRODUCTS

Not used.

Part 3 – EXECUTION

Not used.

Contract - Bid 21-50
Tanglewood Branch Restoration
Appendix A - City Bid Package

3.00 TEMPORARY ENVIRONMENTAL CONTROLS

Part 1 – GENERAL

3.10 DESCRIPTION

- A. The work conducted under this section will consist of the prevention and/or mitigation of impacts from pollution and erosion during construction. This section sets forth the requirements to prevent or minimize the production of sediment and other pollutants to the water and air during construction operations.
- B. Control of sediment production and its introduction to the water course shall be prevented or minimized during all operations to complete the work under this contract. The following items set forth some, but not necessarily all, techniques which may be required under this contract.
- C. Protect adjacent properties and water resources from erosion and sediment pollution throughout from the beginning of the work until final acceptance.

3.11 RELATED SECTIONS

- A. UNIT PRICES
- B. SITE PREPARATION
- C. SITE FINISHING

3.12 UNIT PRICES

- A. Payment for this item shall be made on a lump sum price as established in the bid documents. Such payment shall constitute full compensation for all labor, equipment, tools, disposal and all other items incidental to the completion of the work. Compensation for any item of work described in the contract, but not listed in the Bid Form, will be included in the payment for the item of work to which it is made subsidiary. Unit prices for work covered under this section are defined in section 1, including incidentals, related work, method of measurement, and partial payment provisions, if any.

3.13 QUALITY ASSURANCE

- A. Work under this section shall be performed by workers trained and experienced in this type of work.
- B. The **CONTRACTOR** is responsible for reviewing all drawings, specifications and site conditions to become familiar with the requirements.

Part 2 - PRODUCTS

3.20 MATERIALS

- A. All materials utilized shall meet the requirements as set forth in this section. All materials

and/or supplies utilized for the purpose of pollution control shall be of new or good condition.

- B. Quick germinating and growing grasses such as wheat, rye, oats, barley, brown top millet, or sudan grass, meeting the requirements of the Arkansas State Plant Board.
- C. Fencing for siltation control shall be filter fabric supported by posts and woven wire. Fabric shall be Mirafi 140N, or approved equal. Type 4 filter fabric may also be used. Pre-fabricated silt fence rolls may be substituted on approval of the **ENGINEER** or Project Manager.

Type 4 Filter fabric shall be a permeable woven fabric that has high strength, high dimensional stability even when wet, good soil filtration characteristics, and high resistance to tear propagation in all directions with the following characteristics:

<u>Property</u>	<u>Test Method</u>	<u>Min Avg Roll Values</u>
Grab Tensile Strength	ASTM D 4632	120 x 100 lbs.
Grab Elongation	ASTM D 4632	10%
Mullen Burst Strength	ASTM D 3786	300 psi
Puncture Strength	ASTM D 4833	60 lbs.
Trapezoidal Tear Strength	ASTM D 4533	60 lbs.
Apparent Opening Size	ASTM D 4651	20
Permittivity	ASTM D 4491	0.2 sec-1
Flow Rate	ASTM D 4491	20.0 gpm/sq ft
UV Resistance	ASTM D 4355	70% Strength Retained

The fabric shall be approved by the Project Manager. He or she may allow fabric that has some similar but not the exact same characteristics as the above. Any Type 3 fabric shall be on the AHTD qualified products list.

Straw wattles may be used in place of silt fencing in areas approved by the **ENGINEER**

- D. Erosion control matting, if required, shall be either 13.1 ft x 83 ft coir fabric or 6.56 ft x 166 ft dependent on specified needs. Material shall have a weight of 29 oz/ SY, dry tensile strength machine direction of 2024 lbs/ft and cross direction dry tensile strength of 1160 lbs/ft. Weight tensile strength machine direction of 1776 lbs/ft and 936 cross direction tensile strength 936 lbs/ft. A thickness of 0.5 in, minimum twine count MD x CD per foot of 39 x 18. Slopes in excess of 3:1 shall have erosion matting.
- E. Temporary mulches such as loose hay, straw, netting, wood cellulose or agricultural silage.

Part 3 - EXECUTION

3.30 GENERAL

- A. Based on the area of disturbance, a Storm Water Pollution Prevention Plan (SWPPP) complete with a description of the best management practices to be followed and a Construction Site Notice is required under ADEQ's Construction General Permit ARR150000 for this site. The **ENGINEER** shall be responsible for providing the SWPPP and Construction Site Notice. The **CONTRACTOR** shall be responsible for maintaining a copy of

- the SWPPP and Construction Site Notice on site at all times.
- B. The Drawings may indicate approximate locations for erosion control devices such as a stone construction entrance and silt fencing. These should be considered minimum requirements at approximate locations. Maintain erosion control measures required to control erosion and siltation based on site conditions encountered and the nature of the construction. Items shown on the plan are for general direction. The construction site is dynamic. The **CONTRACTOR** is responsible for controlling flow from the site and implementing any measures necessary to do this during every phase of the project.

SEDIMENT AND EROSION CONTROL MEASURES

- A. Sediment production and its introduction to the water course shall be prevented or minimized during all operations to complete the work for the project. The following items set forth some, but not necessarily all, techniques which may be required for the project.
- B. General:
1. Place erosion control systems at all locations necessary to control work area from erosion during construction.
 2. All sediment spilled, dropped, washed or tracked onto public roadways shall be removed immediately by the **CONTRACTOR**.
 3. Temporary erosion control systems shall be maintained to control siltation at all times during construction operations. Failure to maintain erosion control systems in satisfactory condition may result in a deduction from pay requests.
 4. Respond to any maintenance or additional work ordered by the **ENGINEER** within a 48-hour period.
- C. Project Staging:
1. Soil disturbance during construction will be staged to minimize the area of disturbance at any given point in the construction process.
 2. The **ENGINEER** may limit the surface area of erodible earth material exposed by clearing and grubbing, excavation, borrow and embankment operations and direct that permanent or temporary erosion control measures be provided immediately. Incorporate all permanent erosion control features into the project at the earliest practical time to minimize the need for temporary controls. Permanently seed and mulch cut slopes as the excavation proceeds to the extent considered desirable and practical.
 3. Slopes that erode easily shall be temporarily seeded as the work progresses with a wheat, rye or oats application.
- D. Temporary Mulching:
1. Temporary mulching may be required when permanent vegetated stabilization of the disturbed areas will be delayed. Temporary mulching will be required when stockpiles of topsoil and fill will not be used for an extended period of time. Temporary mulch will be required as shown on the Drawings and when designated in the specifications.
 2. Temporary mulching will be accomplished by the application of cellulose hydro-mulch, chopped hay or straw, tackifiers, burlap, cellulose mat or another acceptable erosion control material.
 3. Materials such as cellulose mats, burlap and other products manufactured for erosion control shall be installed in accordance with the manufacturer's specifications and instructions.

4. Temporary mulch provided by cellulose hydro-mulch and hay or straw will be completed as set forth in the site finishing specification, pages 17-20.

E. In-Channel Sediment Control:

1. If required during construction, sediment laden water generated within the area of new channel excavation will be pumped to a secondary channel that contains rock check dams. The water will filter slowly through this channel before discharging to the main stem of Tanglewood Branch.
2. Discharge areas from all pump hoses shall be stabilized. At no time shall the pump discharge be allowed to cause erosion at the discharge point. The **CONTRACTOR** shall use rock, geotextile, a concrete energy dispersion device or another suitable method to protect the pump discharge point.
3. If water needs to be pumped around any particular area, it will be filtered through a dewatering bag if the water contains a significant amount of sediment.
4. Sediment may also be controlled by constructing by-pass channels to divert flow around work areas.
5. Changes to the **CONTRACTOR**'s sediment control measures can be required by the Project Manager or **ENGINEER** upon observation of inadequate filtration of the sediments or upon request of applicable regulating agencies.

3.32 EQUIPMENT FUELS AND LUBRICANTS

- A. The **CONTRACTOR** shall take all necessary precautions to prevent the spill of chemical pollutants. Chemical pollutants may include, but are not limited to, fuel, oil, grease and hydraulic fluid.

B. Equipment Leaks:

1. All equipment used on the project shall be free of leaks and excessive deposits of materials such as fuel, hydraulic fluid, oil and other lubricants.
2. At the start of each workday, the **CONTRACTOR** shall perform a visual inspection of each piece of equipment to check for leaks. During equipment operations, the **CONTRACTOR** shall watch for leaks which may develop.
3. In the event a piece of equipment develops a leak during the construction work, the **CONTRACTOR** shall immediately remove the machine from the stream channel area and repair the leak. All excess fluids will be cleaned from the machine prior to its return to the work area. Any spillage of fluids during repairs shall be cleaned up with contaminated soil removed from the project area and disposed of in an approved location for the type of materials.

C. Equipment Fueling:

1. The **CONTRACTOR** shall provide for safe fueling of all equipment within the work area. The **CONTRACTOR** must be aware that the work is being performed in the Tanglewood Branch Watershed area.
2. Under no circumstances shall equipment be fueled within the stream channel area.
3. The **CONTRACTOR** shall carefully fuel all equipment with special attention not to overflow the tank and create spillage. All fuel tanks shall have tight, leak proof caps.
4. All equipment re-fueling must be completed under the observation of the person conducting the fueling operations. At no time will fueling be conducted using automatic shut-offs on the pump or without an observer present.

D. Fuel Storage:

1. All fuel stored on site must be in a suitable container. Fuel storage in containers greater than five (5) gallons shall be in a containment tank which meets or exceeds NFPA standards or other applicable local, state and federal regulations.
2. Pumps on fuel storage units must be in good working order and free of leaks. Hoses and nozzles must also be free of leaks. The **CONTRACTOR** shall remove leaking fueling equipment from the work site upon direction of the **ENGINEER**.
3. Any fuel storage container used on site which has a capacity of greater than five (5) gallons must be constructed of a double-wall design, or must have a suitable containment structure as part of the tank. Tanks should meet NFPA standards.

E. Equipment Service and Repair:

1. In the event that the **CONTRACTOR** must service or repair equipment during construction, appropriate measures will be taken to prevent contamination of the soil and/or water during the service/repair operations.
2. Under no circumstances will equipment be serviced in the stream channel area. All equipment must be removed from the channel to the flood plain area for servicing.
3. All waste lubricants and other chemicals will be disposed of in sealed, water tight tanks. No more than five (5) gallons of waste lubricants will be retained on site. All waste fluids, filters, parts and other items related to machinery service and repair shall be removed from the work area and disposed of in an appropriate manner.

3.33 SANITARY FACILITIES

- A. The **CONTRACTOR** shall provide adequate sanitary facilities for the **CONTRACTOR**'s work force, if required. Chemical toilets shall be provided in a quantity that is consistent with the requirements of state and/or federal regulations. Chemical toilets will be placed no closer than one hundred (100) feet from the river edge. The **CONTRACTOR** will provide for routine maintenance and cleaning of the sanitary facilities.

3.34 OTHER CHEMICALS

- A. In the event the work requires the use of other chemicals (i.e., herbicides) the **CONTRACTOR** will use the chemicals in a manner that is consistent with the chemical's labeled use and the manufacturer's instructions.

3.35 AIR POLLUTION

- A. Debris Burning:
1. The burning of trash, brush or other debris shall not be allowed.
- B. Dust Control:
1. The **CONTRACTOR** shall be responsible for the control of excessive dust on both public roads and project access roads. The **CONTRACTOR** shall be prepared, at the request of the Project Manager or **ENGINEER**, to suppress dust.
- C. Equipment Emissions:
1. The **CONTRACTOR** shall be responsible to insure that all equipment has proper and functioning emissions control systems. All equipment will have mufflers and will be free of excessive smoke emissions. In the event the **CONTRACTOR**'s equipment is emitting excessive smoke, the equipment will be removed from the work area and repaired or a

substitute piece of equipment will be brought to the project site. The **CONTRACTOR** will be solely responsible for the mobilization and demobilization costs associated with replacement of any equipment which is pulled from service.

3.36 MAINTENANCE, REMOVAL AND RESTORATION

- A. The **CONTRACTOR** shall maintain all pollution and erosion control measures in good operating form until such time that the measures are no longer needed. Upon completion of the work, the **CONTRACTOR** shall remove any temporary pollution and erosion control measures installed during construction and shall restore the site to original conditions as reasonably practical.

Contract - Bid 21-50
Tanglewood Branch Restoration
Appendix A - City Bid Package

4.00 FIELD ENGINEERING

Part 1 – GENERAL

4.10 SUMMARY

- A. This Section defines staking and field engineering services that the **ENGINEER** will furnish, and sets forth responsibilities of the **CONTRACTOR** regarding the utilization acceptance of same.
- B. Definitions
 - 1. "Control Stakes" are the original reference points set by and approved by the **ENGINEER** for the construction work, i.e. centerline staking at the PI's, PC's, & PT's and TBM's.
 - 2. "Construction Staking" is all other staking necessary, as the job progresses, to construct the project according to the drawings and specifications.
 - 3. "Field Engineering" refers to design determinations made by the Engineer during construction that follow the general scope of work presented in the Plans and Specifications but are adjusted to account for unknown field conditions observed during construction.

4.11 RELATED SECTIONS

- A. STREAM OR RIVER CHANNEL AND FLOODPLAIN EXCAVATION
- B. ROCK RIFFLE GRADE CONTROL AND BOULDER CLUSTERS
- C. SOIL MATTRESSES
- D. STACKED ROCK WALL
- E. STONE ROCK REVETMENT

4.12 REQUIREMENTS

- A. The **ENGINEER** shall provide the following staking:
 - 1. Set temporary bench marks.
 - 2. Reset control stakes found to be in error.

4.13 CONSTRUCTION STAKING

- A. The **ENGINEER** shall provide all construction staking as needed to complete the Work.

4.14 FIELD ENGINEERING

- A. The **ENGINEER** will make final design determinations regarding planned work so that the implemented work follows the general scope shown in the Plans and Specifications AND is compatible with the on-the-ground conditions that are encountered during construction.
- B. Variations in construction materials and site conditions will require design decisions to be made in the field. The **ENGINEER** will work directly with the **CONTRACTOR** to implement

field-engineered elements of the Work.

Part 2 - PRODUCTS

Not Used

Part 3 - EXECUTION

Not Used

Contract - Bid 21-50
Tanglewood Branch Restoration
Appendix A - City Bid Package

5.00 SITE PREPARATION

Part 1 – GENERAL

5.10 SECTION INCLUDES

- A. Clearing and Grubbing Materials Preservation
- B. Relocating Construction Materials
- C. Miscellaneous

5.11 RELATED SECTIONS

- A. UNIT PRICES
- B. TEMPORARY ENVIRONMENTAL CONTROLS
- C. SITE WORK

5.12 UNIT PRICES

- A. Payment for this item shall be made on a lump sum price as established in the bid documents. Such payment shall constitute full compensation for all labor, equipment, tools, disposal and all other items incidental to the completion of the work. Compensation for any item of work described in the contract, but not listed in the Bid Schedule, will be included in the payment for the item of work to which it is made subsidiary. Unit prices for work covered under this section are defined previously in the UNIT PRICES section of these specifications, including incidentals, related work, method of measurement, and partial payment provisions, if any.

5.13 QUALITY ASSURANCE

- A. Work under this section shall be performed by workers trained and experienced in this type of work.

5.14 SUBMITTALS

- A. If requested, submit evidence of permission to dispose of site preparation debris on private property.

Part 2 – PRODUCTS

Not Used.

Part 3 – EXECUTION

GENERAL

- A. The work under this specification shall consist of harvesting materials for construction of the streambank stabilization, relocating construction materials, and miscellaneous activities required to prepare the site for construction. Each item of work is considered a separate type of site preparation defined as follows:
1. **Clearing and Grubbing Materials Preservation** – Brush, logs, and sod mats with primarily native vegetation encountered during clearing and grubbing activities will be preserved for use in streambank stabilization and revegetation.
 2. **Relocating Construction Materials** – Materials such as boulders, trees, gravel, and topsoil may need to be distributed throughout the site.
 3. **Miscellaneous** - Demolition, removal, relocation, repair, of any item that is temporarily or permanently in conflict with the proposed items of work. Typically, any item that is not specifically noted as a pay item. It may or may not be indicated on the Drawings.

5.31 CLEARING AND GRUBBING MATERIALS PRESERVATION

- A. During clearing and grubbing activities, any trees, logs, or brush that can be used in construction of the restoration should be stockpiled in locations designated by the **ENGINEER**.
- B. If areas of significant native plant populations are to undergo grubbing, sod mats should be harvested as specified in the SOD MATS section.

5.32 RELOCATION OF CONSTRUCTION MATERIALS

- A. Efforts have been made by the **ENGINEER** to distribute materials throughout the site for efficient use. However, it is anticipated that construction materials, including boulders and fill will need to be distributed throughout the site, depending on need.

5.33 MISCELLANEOUS

- A. Any item not noted under another pay item that may or may not be indicated on the Drawings that needs to be removed or relocated to prepare the site for other items of work that have been noted as a pay item will be included in Site Preparation.

6.00 SITE WORK

Part 1 - GENERAL

6.10 SECTION INCLUDES

- A. These general site work requirements apply to all site work operations.

6.11 RELATED SECTIONS

- A. TEMPORARY ENVIRONMENTAL CONTROLS
- B. SITE PREPARATION
- C. STREAM OR RIVER CHANNEL AND FLOODPLAIN EXCAVATION
- D. SITE FINISHING

6.12 PROJECT CONDITIONS

- A. When uncharted or incorrectly charted underground piping or other utilities and services are encountered during site work operations, notify the **ENGINEER** who will notify the applicable utility company immediately to obtain procedure directions. Cooperate with the applicable utility company in maintaining active services in operation.
- B. Locate, protect and maintain bench marks, monuments, control points and project engineering reference points. Re-establish disturbed or destroyed items at the **CONTRACTOR's** expense.
- C. Control dust caused by the work. Dampen surfaces as required. Comply with pollution control regulations of governing authorities.
- D. Protect existing and do not interfere with existing and planned buildings, structures, paving and other surfaces or facilities on site and adjacent to the site from damage caused by site work operations. Cost of repair and restoration of damaged items at the **CONTRACTOR's** expense.
- E. The **CONTRACTOR** shall be prepared to move construction materials to higher ground if flooding conditions are forecast by meteorologists and if requested by the **ENGINEER**.

Part 2 – PRODUCTS

Not Used.

Part 3 – EXECUTION

6.30 EXAMINATION

- A. Examine the areas and conditions under which the site work is performed. Do not proceed with the work until unsatisfactory conditions are corrected.
- B. Consult the records and drawings of adjacent work and of existing services and utilities which may affect site work operations.

7.00 SITE FINISHING

Part 1 – GENERAL

7.10 SCOPE

- A. This section includes restoration of areas disturbed by this project. "Disturbed by this project" is defined as the excavation area plus any area in project vicinity disturbed by the **CONTRACTOR**'s operations, including operations of **CONTRACTORS** and suppliers, and utility owner operations necessary to complete this project.
- B. The **CONTRACTOR** shall perform the placement of seed and straw on all disturbed areas within the project area, excluding those areas treated with other erosion control methods as part of the construction effort.
- C. The **CONTRACTOR** shall install erosion control fabric on areas of the constructed bench beyond the coverage of the soil mattresses as detailed on the drawings.
- D. All property improvements shall be restored in kind or as nearly as practicable as determined by the **ENGINEER**.

7.11 SCOPE

- A. TEMPORARY ENVIRONMENTAL CONTROLS
- B. MATERIAL STORAGE AND HANDLING REQUIREMENTS
- C. STREAM OR RIVER CHANNEL AND FLOODPLAIN EXCAVATION
- D. SOIL MATTRESSES
- E. SOD MATS
- F. STREAMBANK FILLING, SHAPING, OR GRADING
- G. STONE ROCK REVETMENT
- H. CONCRETE AND ASPHALT REMOVAL

7.12 UNIT PRICES

- A. Payment for this item shall be made on a unit price basis as established in the bid documents. Such payment shall constitute full compensation for all labor, equipment, tools, disposal and all other items incidental to the completion of the work. Compensation for any item of work described in the contract, but not listed in the Bid Schedule, will be included in the payment for the item of work to which it is made subsidiary. Unit prices for work covered under this section are defined previously in the UNIT PRICES section of these specifications, including incidentals, related work, method of measurement, and partial payment provisions, if any.

7.13 REGULATORY REQUIREMENTS

- A. Comply with regulatory agencies for fertilizer and herbicide application.

7.14 DELIVERY, STORAGE, AND HANDLING

- A. Store and protect materials under provisions described previously in the MATERIALS STORAGE AND HANDLING REQUIREMENTS section of these specifications.

7.15 EXISTING CONDITIONS

- A. Beginning of work constitutes acceptance of existing conditions.

PART 2 - PRODUCTS**7.20 GENERAL**

- A. All materials shall be supplied as specified in Section 16.

7.21 SEED

- A. Seed will be supplied as outlined in specifications

7.22 MULCH

- A. Straw mulch shall consist of well threshed wheat, rye or oat straw and shall be reasonably bright. **Mulch must be free of mold and noxious seed and shall not be musty, caked, decayed or excessively dusty.**
- B. Wood Cellulose Fiber Mulch (WCFM) shall consist of prepared wood cellulose processed into a uniform fibrous physical state, and shall contain a dye to facilitate visual inspection of the uniformity of the application. WCFM shall not contain germination or growth inhibiting factors.

7.23 EROSION CONTROL FABRIC

- A. Coir fiber erosion control netting to be used as erosion control fabric. The fabric will have a minimum unit weight of 29 oz/sy. Further specified in Section 16.

7.24 Mushroom Compost

- A. Mushroom compost free of viable seed.

PART 3 - EXECUTION

7.30 INSPECTION AND SITE PREPARATION

- A. Verify that prepared soil base is ready to receive the work of this Section.
- B. Prior to the start of operations, the **CONTRACTOR** shall ensure all erosion and sediment control measures have been installed as shown in the SWPPP.
- C. The **CONTRACTOR** shall perform all final grading operations at right angles to the slope. Final grading and shaping may not be required for temporary seeding.

7.31 PREPARATION OF SOIL

- A. Prepare soil to eliminate uneven areas and low spots. Maintain lines, level profile, and contours. Make change in grade gradual. Blend slopes into level areas.
- B. Remove foreign materials, weeds, and undesirable plants and their roots. Remove contaminated soil. If requested by **ENGINEER**, place mushroom compost on slopes adjacent to BioD-Block installations.

7.32 APPLICATION OF SEED AND STRAW

- A. Seed mixture consisting of nursery and native grass types shall be applied at a rate of 80 pounds per acre.
- B. Straw mulch shall be applied at a rate of 2 tons per acre by hand or using a mechanical blower.

7.33 PLACING EROSION CONTROL FABRIC

- A. Erosion control fabric, excluding the fabric associated with the BioD-Block, shall be installed in 12' strips that are oriented longitudinally opposed to the river channel. A six inch (6") gap will be left along the long seams between every other strip of coir fabric. This specification will result in a twenty-four foot wide strip of fabric that is joined by stakes at the overlap. The leading edge of the fabric shall be placed so that fabric from the BioD-Block will overlap the upslope fabric by no more than six inches (6"). The fabric shall be fastened to the ground using hardwood wedge stakes. The stakes shall be placed on 3 feet centers along the front edge of the length of the fabric and in staggered rows off-set by 3 feet. The fabric shall be tight and without loose or bunched material once fastened to the ground. Fabric shall be tied into the fabric of the BioD blocks. Finer details related to this section will be field engineered.

7.34 CLEANING

- A. During Work keep premises neat and orderly including organization of storage areas. Trash, including debris resulting from removing weeds or rocks from planting areas, lawn preparation, preparing beds, or planting plants shall be removed from site daily as Work progresses.

7.35 DISPOSAL OF EXCESS MATERIALS

- A. Any garbage, rubbish, trash or similar items found during construction, shall be set aside by the **CONTRACTOR** and disposed of by the **CONTRACTOR**.

7.36 FINAL ACCEPTANCE

- A. At the end of the establishment period, the **ENGINEER** will inspect all work for Final Acceptance upon written request of the **CONTRACTOR**. The request shall be received at least two (2) calendar days before the anticipated date for final inspection.
- B. Upon completion and re-inspection for all repairs or renewals necessary in the judgment of the **ENGINEER** at that time, the work of this Section shall be considered complete and the **CONTRACTOR** shall be relieved of the responsibility for care and maintenance of the accepted job site.
- C. Work shall be considered complete and eligible for acceptance only after fulfillment of the following requirements and any applicable requirements as stated elsewhere in the Specifications.
 - 1. All materials have been installed, maintained, and protected according to the Specifications.
 - 2. All tools, surplus materials, equipment, debris, etc. shall be removed and the site left in a neat and acceptable condition.

Contract - Bid 21-50
Tanglewood Branch Restoration
Appendix A - City Bid Package

8.00 STREAM OR RIVER CHANNEL AND FLOODPLAIN EXCAVATION

Part 1 – GENERAL

8.10 DESCRIPTION

- A. In natural channel design-based river restoration projects, the primary focus is placed on excavation and grading to produce a river channel with correct geomorphic features. During the implementation of these projects, extensive excavation and fill may be required to restore a river's plan form (meanders) and cross sectional area. Excavation under this specification also focuses on the development of a stable riverbed profile and may require the construction of a step-pool, riffle-pool, plunge pool or cascade riverbed complex. For this project river gravels will be imported and incorporated in the reconstructed riverbank. Soil and overburden will be excavated to alter channel dimensions. Gravels will be backfilled into the newly excavated channel to create a channel with a gravel bottom. Portions of the banks along the restoration reach will be excavated to create floodplain benches and to increase channel capacity. The elevation of the existing channel will be modified to create a profile illustrated in the longitudinal profile drawings shown in the plan set.

8.11 RELATED SECTIONS

- A. UNIT PRICES
- B. TEMPORARY ENVIRONMENTAL CONTROLS
- C. SITE WORK
- D. SITE FINISHING

8.12 UNIT PRICES

- A. Payment for this item shall be made on a unit price basis as established in the bid documents. Such payment shall constitute full compensation for all labor, equipment, tools, disposal and all other items incidental to the completion of the work. Compensation for any item of work described in the contract, but not listed in the Bid Schedule, will be included in the payment for the item of work to which it is made subsidiary. Unit prices for work covered under this section are defined previously in the UNIT PRICES section of these specifications, including incidentals, related work, method of measurement, and partial payment provisions, if any.

8.13 QUALITY ASSURANCE

- A. Work under this section shall be performed by workers trained and experienced in this type of work, specifically building river channels with correct geomorphic features. Work under this section shall be performed in the presence of the **ENGINEER**.
- B. The **CONTRACTOR** is responsible for reviewing all drawings, specifications and site conditions to become familiar with the requirements.

8.14 SUBMITALS

- A. Prior to commencement of any work, the **CONTRACTOR** shall review with the **ENGINEER** the sequence and methods of construction the **CONTRACTOR** will use to complete the work. The sequence and methods for cutting, filling and grading of existing materials, as well as the method and sequence of operations for excavation of borrow materials from specified areas shall be reviewed. Such discussions shall include the order of work and equipment to be used. The **ENGINEER** retains the right to make a final determination on the **CONTRACTOR's** proposed work plan. The **ENGINEER** may designate alternate borrow areas during progression of the work. Any alternate borrow areas will be reviewed with the **CONTRACTOR** and will meet the conditions as set forth in this section.

Part 2 – PRODUCTS

8.20 MATERIALS

- A. The majority of gravels will be imported from offsite, with some limited channel excavation in certain areas. Some of the gravels will be used in the construction of Stacked Rock benches. In other instances, gravels will be used as backfill in portions of the new channel.
- B. In cases where additional fill is required, the **ENGINEER** will identify suitable borrow areas in the project site area. After removal of the required material from the borrow area, the **CONTRACTOR** will grade the site and establish a vegetative cover as designated in Part 3 below.
- C. In some instances, borrow areas will be excavated and left as wetland ponds. In these cases, the borrow-area pond will be constructed such that the side slopes do not exceed 3:1 and with a depth of no less than two feet (2').
- D. When a borrow area is not available, fill may be required from off-site sources. The type and quality of fill, as may be required, are set forth in the Drawings.
- E. When fill materials are stockpiled at the **site**, sediment control may be required by the **ENGINEER** and/or regulatory agencies. The requirement for sediment control during the material storage period is determined on a case by case basis. The **CONTRACTOR** should be prepared to install adequate sediment control as specified in Temporary Environmental Controls section of these specifications.

Part 3 – EXECUTION

8.30 CONSTRUCTION

- A. Excavation for the construction of the designed river channel shall be as shown on the Drawings. Grading and shaping of the channel shall be as shown in the plan, cross section, and longitudinal view drawings and additional construction detail drawings.
- B. The existing elevations and contours shown on the plans, cross sections and profile were surveyed in early 2020. Contours outside of the channel area are from LIDAR data collected in 2015 and TOPO data from other organizations. Grades and elevations may have changed slightly since the original survey was completed due to erosion, sedimentation and fill. The **CONTRACTOR** is responsible for confirming existing grades and to adjust the excavation and fill quantities as necessary to produce the desired channel configuration.

- C. Portions of the gravel excavated from the river channel will be incorporated into the Stacked Rock bench and will be used to construct the bankfull benches as shown on the Drawings.
- D. Topsoil generated through excavation of the new channel and/or from excavation of the banks of the existing channel will be stockpiled for later use when constructing stack rock benches and soil mattresses. Excess topsoil may need to be loaded by the **CONTRACTOR** to third party haulers. If excess topsoil is loaded by the **CONTRACTOR**, a change order to the contract will be executed.
- E. Live vegetation that is present in the excavation area will be either incorporated into the stack rock bench or placed on high ground for later use as directed by the **ENGINEER**
- F. Excess gravel beyond that which is needed for construction of the benches will be stockpiled on high ground at a location specified by the **ENGINEER**. Excess gravel may be loaded by the **CONTRACTOR** to third party haulers. If excess gravel is loaded by the **CONTRACTOR**, a change order to the contract will be executed.
- G. The **CONTRACTOR** shall at all times conduct the work in full compliance with all OSHA regulations and any other applicable local, state or federal regulations.
- H. All activities will act in conjunction with both existing and planned design infrastructure that does not negatively affect their form and function.

8.31 SITE STABILIZATION

- A. The **CONTRACTOR** shall be responsible for providing stabilization of all disturbed areas immediately after the completion of grading. Stabilization will be either temporary or permanent in nature.

9.00 SOIL MATTRESSES

Part 1 – GENERAL

9.10 DESCRIPTION

- A. Soil mattresses will be constructed using BioD-Blocks, a coir fiber block with an attached coir fabric to retain soil. The mattresses will be placed on top of the inner berm and bankfull benches to reduce the erosion potential during re-establishment of vegetation. The soil mattresses provide immediate erosion control on inner berm and bankfull benches and a growing medium for nursery and native plants. **CONTRACTOR** will have to coordinate with a 3rd party, responsible for installing, grading, and planting the soil mattresses.

9.11 RELATED SECTIONS

- A. UNIT PRICES
- B. SITE WORK
- C. SITE FINISHING
- D. FIELD ENGINEERING

9.12 UNIT PRICES

- A. Payment for this item shall be made on a unit price basis as established in the bid documents. Such payment shall constitute full compensation for all labor, equipment, tools, disposal and all other items incidental to the completion of the work. Compensation for any item of work described in the contract, but not listed in the Bid Schedule, will be included in the payment for the item of work to which it is made subsidiary.

9.13 QUALITY ASSURANCE

- A. Work under this section shall be performed by workers trained and experienced in this type of work, specifically building river channels with correct geomorphic features. Work under this section shall be performed in the presence of the **ENGINEER**.
- B. The **CONTRACTOR** is responsible for reviewing all drawings, specifications and site conditions to become familiar with the requirements.

Part 2 – PRODUCTS

9.20 MATERIALS

- A. BioD-Blocks and hardwood wedge stakes shall be used to wrap soil and create a 16-inch thick encapsulated soil feature as specified in the Drawings. They shall be 10-ft long, 16-in tall and 9-in thick densely packed mattress coir block with woven coir fabric attached. Three sides of the coir fiber block are wrapped with woven coir fabric and free ends of woven coir fabric is extended from top and bottom of the coir fiber block. Each block has a male and a

female end for secure connection. The block has invisible holes in the middle of the coir block. Fabric length top - 28 in, Fabric length bottom - 56 in. Fabric length female end - 6 in. Tensile strength of fabric: Machine Direction - 1740 lbs/ft, Cross Direction - 1176 lbs/ft. Unit Weight - 4.8 lbs/ft.

- B. Coir Wattles 6 in Diameter, shall be cylindrical shape rolls, with 2 in x 2 in (5 cm x 5 cm) knotted, high strength outer netting made of 60 lbs. (267 N) strength machine spun bristle coir twines. Lightly packed with cleaned mattress coir fiber in a uniform manner to filter sediment effectively. Made to 15 ft. long sections. Tensile Strength twine - 60lbs, Mesh opening 2 in x 2 in, Unit weight 0.6 lbs./ft., density 3.4 lbs./cu. Ft., and 100% coconut fiber.
- C. Coir Wattles 9" Diameter, shall be cylindrical shape rolls, with 2 in x 2 in (5 cm x 5 cm) knotted, high strength outer netting is made of 60 lbs. (267 N) strength machine spun bristle coir twines. Lightly packed with cleaned mattress coir fiber in a uniform manner to filter sediment effectively. Made to 15 ft. long sections. Mesh opening 2 in x 2 in, unit weight 1.5 lbs/ft, density 3.4 lbs/cu ft, 100% coconut fiber.
- D. Coir Wattles 12" Diameter, shall be cylindrical shape rolls, with 2 in x 2 in (5 cm x 5 cm) knotted, high strength outer netting is made of 90 lbs. (400 N) strength machine spun bristle coir twines. They are lightly packed with cleaned mattress coir fiber in a uniform manner to filter sediment effectively. Made to 10 ft. long sections, Mesh opening 2 in x 2 in, unit weight 3 lbs/ft, density 3.8 lbs/cu ft, 100% coconut fiber.
- E. 18" Wedge Stakes will be hard oak, 17 1/2" in height, 1 3/8" in width, and 2 3/4" in length on top. The bottom of the stake will form a triangle from the top. Additional drawings are presented in Drawing # 1 18" Wooden Stake Design.
- F. 22" Wedges Stakes will be hard oak, 22" in height, 1 3/8" in width, and 2 3/5" in length on top. The bottom of the stake will form a triangle from the top. Additional drawings are presented in Drawing # 3 22" Wooden Stake Design
- G. Notch Stakes will be hard oak, 11 7/8" in height, 1 1/2" in width, and 1 3/8" in length. A notch will form at the top of the stake and a pyramid at the bottom according to dimensions presented in Drawing # 2 Notch Stakes.
- H. Nursery grass seed such as wheat or a mixture of wheat and rye mixed with native plant seed.
- I. Native trees, shrubs, and grasses in the form of potted plants, bare roots, and grass plugs and clumps.

Part 3 – EXECUTION

9.30 CONSTRUCTION

- A. Following construction and/or excavation of the inner berm bench, starting at the upstream end of the area where installation will occur, the **ENGINEER** will establish the alignment of the first soil mattress lift.

- B. A 3rd party will install, pre-plant, and stake the BioD-Blocks for subsequent filling, grading (Items C through G below), and staking as described in subsequent sections.
- C. The Bio-D Block shall be placed on top of inner berm bench subgrade. The female end of the block will be placed on the downstream end. The edge of the block will be placed at a specified distance from the edge of the inner berm bench slope face, which will be specified in the Drawings and may be revised through Field Engineering. Prior to staking, see B. The bottom fabric should be staked to the subgrade using hardwood wedge stakes at a spacing of 24" placed near the edge of the outstretched bottom fabric.
- D. A 3rd party will place willow, buttonbush, and other appropriate native plants under the Bio-D Block so that approximately 4" of plant material extends outward from the face of the coir block prior to the staking of the BioD-Block.
- E. Several blocks should be installed adjacent to one another with solid contact between adjacent blocks. As installation progresses downstream, additional blocks should be added. Blocks should be tied together at the block by re-using the coir strands that bundle the block for delivery. Fabric between consecutive blocks should be tied together on the bottom, streamside edge, and top of the block.
- F. All seams should have the upstream end overlapping the downstream end.
- G. A 3rd Party contractor will insert native plants in the plug holes on the Bio-D Block face.
- H. Top soil approved by the **ENGINEER** shall be placed and spread evenly on the bottom layer of fabric beginning at the upstream end. Topsoil shall be placed to fill up to the height of the Bio-D Block (12 or 16 inches). The topsoil shall be mechanically compacted and additional topsoil shall be placed to create a finished, compacted, surface that is even with the top of the Bio-D Block.
- I. Apply 2" of mushroom compost to soil surface and mechanically incorporate into topsoil.
- J. Temporarily stake the top fabric by pulling fabric taught, place a hardwood stake 2 feet from the stream-ward edge of the block system. Using the wedge stake for leverage, tighten the fabric and hammer the wedge into place. Stakes should be placed so the angled edge faces away from the stream. Stakes shall be oriented perpendicular to the ground. For temporary staking, only drive the stake to three-quarters ($\frac{3}{4}$) of the stake length.
- K. The top fabric edge shall overlay coir fabric placed on upper slopes. Once overlapped wedge stakes should be placed every three feet along the length of the mattress. Bio block fabric length can vary, therefore field engineering maybe required.

10.00 SOD MATS

Part 1 – GENERAL

10.10 DESCRIPTION

- A. Sod mats composed of native vegetation may be utilized to stabilize the top elevation of the completed inner berm and bankfull benches. Sod mats provide immediate vegetation, soil stability, and consolidated mass to protect the constructed benches.

10.11 RELATED SECTIONS

- A. SITE WORK
- B. SITE FINISHING
- C. SOIL MATTRESSES

10.12 UNIT PRICES

- A. Payment for this item shall be made on a unit price basis as established in the bid documents. Such payment shall constitute full compensation for all labor, equipment, tools, disposal and all other items incidental to the completion of the work. Compensation for any item of work described in the contract, but not listed in the Bid Schedule, will be included in the payment for the item of work to which it is made subsidiary. Unit prices for work covered under this section are defined previously in the UNIT PRICES section of these specifications, including incidentals, related work, method of measurement, and partial payment provisions, if any.

10.13 QUALITY ASSURANCE

- A. Work under this section shall be performed by workers trained and experienced in this type of work, specifically building river channels with correct geomorphic features. Work under this section shall be performed in the presence of the **ENGINEER**.
- B. The **CONTRACTOR** is responsible for reviewing all drawings, specifications and site conditions to become familiar with the requirements.

Part 2 – PRODUCTS

10.20 MATERIALS

- A. Sods mats collected from the project site.

Part 3 – EXECUTION

10.30 CONSTRUCTION

- A. The **ENGINEER** will identify sites for sod mat harvesting that have minimal invasive species.

- B. Sod mats will be harvested using either a front end loader or skid steer.
- C. The sod mat shall be between 8" and 12" thickness.
- D. The sod mat shall be placed with the root surface down, along the edge of where benches change slope or as directed by the **ENGINEER**.
- E. The sod mat shall be placed in a manner that minimizes breakage or significant deterioration of the sod mat structure.
- F. The sods mat shall be placed so that no gaps are formed between successively placed sod mats.
- G. The maximum estimated round trip travel time is 10 minutes.

Contract - Bid 21-50
Tanglewood Branch Restoration
Appendix A - City Bid Package

11.00 ROCK RIFFLE GRADE CONTROL AND BOULDER CLUSTERS

Part 1 – GENERAL

DESCRIPTION

- A. Rock riffle grade control and converging boulder clusters are in-stream structures constructed for the purpose of grade control, dissipating energy, and reducing shear stress on streambanks. These structures are constructed as shown on the Drawings, and largely as directed by the **ENGINEER** using FIELD ENGINEERING methods. Rock structures shall consist of both footer rocks, placed below the invert of the proposed channel, as well as top rocks.

11.11 RELATED SECTIONS

- A. UNIT PRICES
- B. SITE WORK
- C. SITE FINISHING
- D. FIELD ENGINEERING

11.12 UNIT PRICES

- A. Payment for this item shall be made on a unit price basis as established in the bid documents. Such payment shall constitute full compensation for all labor, equipment, tools, disposal and all other items incidental to the completion of the work. Compensation for any item of work described in the contract, but not listed in the Bid Schedule, will be included in the payment for the item of work to which it is made subsidiary.

11.13 QUALITY ASSURANCE

- A. Work under this section shall be performed by workers trained and experienced in this type of work, specifically building stream channels with correct geomorphic features. Work under this section shall be performed in the presence of the **ENGINEER**.
- B. The **CONTRACTOR** is responsible for reviewing all drawings, specifications and site conditions to become familiar with the requirements.

Part 2 - PRODUCTS

11.20 QUALITY

- A. Rock structures shall be constructed of angular, flat or cubed rock.
- B. Rock should be of sufficient hardness to resist weathering and shall be free of cracks and other blemishes. Porous rock such as some limestones and soft rock such as shales are not allowed. In some cases, native rock present on the site may be authorized for use by the **ENGINEER**. In no instance will concrete or other "debris" be allowed.

- C. Rock that meets the specifications for the construction of rock grade control will be placed in a specific location on site by the **ENGINEER**. The **CONTRACTOR** shall coordinate with the **ENGINEER** prior to rock grade control construction to ensure that the correct rock is used.

11.21 ROCK SIZE, WEIGHT AND SHAPE

- A. Rock used for the construction of rock grade control structures will meet the following size requirements. All units are shown in feet (ft) and tons (tons). Rock sizes apply to both footer rocks and final layer rocks.

	A-Axis	B-Axis	C-Axis	Weight (ton)
Minimum Size	3'	2'	1.5'	1
Maximum Size	8'	5'	3'	4

- B. Rock Weight - The dry unit weight of each rock shall be 145 lbs/cu ft or greater.
- C. Rock fragments shall be angular, flat or cubed in shape. Uniform, cubed rock is best for top rocks while rocks with more roundness may be used as footer rocks.
- D. Rock on Tanglewood Branch will be large native boulders. The rock shall be hard sandstone material, very flat with a low center of gravity. The rock shall have a weight ranging from two to four tons. The rock shall be rectangular in shape and between 1.5 ft. and 2 ft. in thickness. The rock shall be 3 ft. to 5 ft. wide and between 4 ft. and 8 ft. in length.
- E. Rocks on Tanglewood Tributary will be a variety of medium to large native boulders for Tanglewood Tributary with flat tops and bottoms ranging from 50% at 1 to 2.5 tons and 50% 2.5 tons to 4 tons. The rock shall be hard sandstone material. Rock shall have a weight ranging from one to four tons. The rock shall be 2ft to 4ft wide, between 3 ft and 6 ft in length, and 1.5 ft to 2 ft in thickness. The top and bottom shall be generally flat for stacking

Part 3 – EXECUTION

11.30 CONSTRUCTION METHODS

- A. Rock structures shall be installed according to the Drawings or Field Engineered specifications from the **ENGINEER**. All rock structure installation will be done in the presence of the **ENGINEER**.
- B. Placement of footer rocks is critical to the success of rock structures and the **CONTRACTOR** shall insure proper placement.
- C. The construction of rock structures requires equipment which can place rock in precise locations. A suitable sized excavator with a hydraulic thumb is required.
- D. Rock grade control structures shall be constructed so that adjoining rocks taper in an upstream direction from the bankfull elevation (or other designated tie-in elevation) to the stream invert. The **ENGINEER** will designate the general location of the invert(s) during construction.
- E. The downstream end of the rock grade control structure shall be keyed into the stack rock

and/or streambank at the inner berm elevation a minimum of eight feet into the streambank. The rock grade control structure shall be installed with a slope Field Engineered by the **ENGINEER** from the streambed invert to the bankfull elevation.

- F. Rock grade control and the boulder clusters shall be footered to bedrock unless directed otherwise by the **ENGINEER**. Structures may require multiple layers of rock and will often need to be constructed in conditions that prevent direct observation of the rocks due to turbid conditions. The **CONTRACTOR** is expected to physically check the alignment and contact of adjacent boulders.
- G. Grade control footer rocks shall be placed with tight, continuous surface contact between adjoining rocks, except where gaps in the structure are specified. Footer rock shall be placed so as to have no significant gap between adjoining rock.
- H. Filter fabric shall be used to create a barrier that prevents water from percolating through the backfill placed between the rock grade control structure and the downstream riffle. The filter fabric shall be draped into the space between the rock grade control and the upstream excavation trench then backfilled with gravel from the stream. No filter fabric shall be visible after final grading. Filter Fabric shall be Mirafi 600X woven geotextile fabric or a fabric of equivalent strength and quality.

<u>Property</u>	<u>Test Method</u>	<u>Min Avg Roll Values</u>
Grab Tensile Strength	ASTM D 4632	315 x 315 lbs.
Grab Elongation	ASTM D 4632	15%
Puncture Strength	ASTM D 6241	900 lbs.
Trapezoidal Tear Strength	ASTM D 4563	113 lbs.
Apparent Opening Size	ASTM D 4651	40
Permittivity	ASTM D 4491	0.2 sec-1
Flow Rate	ASTM D 4491	4.0 gpm/sq ft
UV Resistance	ASTM D 4355	70% Strength Retained

Clay material may be used in place of filter fabric or in conjunction with fabric as directed by the **ENGINEER**.

- I. As the rock grade control structure is constructed, the **CONTRACTOR** shall chink all voids between the footer rocks, and between the footer rocks and grade control rocks. Voids shall be chinked with small boulders, cobble or rock fragments. Chinking will be conducted such that no voids greater than four inches (4") in size will be present.
- J. Rip-rap shall be placed upstream and below the top of the final layer of rock. The rip-rap will prevent scouring of materials from the upstream edge of the boulders and reduces the chance of excessive rock tilt after large flood events.
- K. An apron of rip-rap and/or waste boulders shall be constructed downstream of any structure tie-in location that does not have any other structural feature downstream of the tie-in. The rip-rap or boulders shall be placed in a manner that creates a slope that will dissipate stream energy, protect the tie-in portion of the structure, and will prevent downstream scour.

- L. Upon completion of the work, the **CONTRACTOR** shall reshape the slopes and stream bottom to the specified elevations. All unsuitable and surplus rocks will be removed from the site.
- M. Boulder clusters will be installed in locations specified in the Drawings or as Field Engineered and directed by the **ENGINEER**. Boulder clusters shall be footered to bedrock unless directed otherwise by the **ENGINEER**.
- N. All activities will need to act in conjunction with existing and planned infrastructure that does not negatively affect their form of function

Contract - Bid 21-50
Tanglewood Branch Restoration
Appendix A - City Bid Package

12.00 STACKED ROCK

Part 1 – GENERAL

DESCRIPTION

- A. Stacked rock will be used to protect critical streambanks or other slopes from erosive forces that exist during flood events. It will be equipment-placed, with footer rocks placed directly on bedrock.

12.11 RELATED SECTIONS

- A. UNIT PRICES
- B. TEMPORARY ENVIRONMENTAL CONTROLS
- C. FIELD ENGINEERING
- D. SITE WORK
- E. SITE FINISHING

12.12 UNIT PRICES

- A. Payment for this item shall be made on a unit price basis as established in the bid documents. Such payment shall constitute full compensation for all labor, equipment, tools, disposal and all other items incidental to the completion of the work. Compensation for any item of work described in the contract, but not listed in the Bid Schedule, will be included in the payment for the item of work to which it is made subsidiary.

12.13 QUALITY ASSURANCE

- A. Work under this section shall be performed by workers trained and experienced in this type of work, specifically building stream channels with correct geomorphic features. Work under this section shall be performed in the presence of the **ENGINEER**.
- B. The **CONTRACTOR** is responsible for reviewing all drawings, specifications and site conditions to become familiar with the requirements.

Part 2 - PRODUCTS

12.20. QUALITY

- A. Stacked rock structures shall be constructed of angular, flat or cubed rock.
- B. Rock should be of sufficient hardness to resist weathering and shall be free of cracks and other blemishes. Porous rock such as some limestone and soft rock such as shales are not allowed unless specified by the **ENGINEER**. In some cases, native rock present on the site may be authorized for use by the Project Manager and/or **ENGINEER**. In no instance will concrete or other “debris” be allowed.

- C. Rock that meets the specifications for the construction of stacked rock structures will be placed in a specific location on site by the **ENGINEER. CONTRACTOR** shall coordinate with the **ENGINEER** prior to stacked rock construction to ensure that the correct rock is used.

12.21. ROCK SIZE, WEIGHT AND SHAPE

- A. Rock used for the construction of stacked rock structures will meet the following size requirements. All units are shown in feet (ft) and tons.

	A-Axis	B-Axis	C-Axis	Weight (ton)
Minimum Size	3'	2'	0.75'	0.75
Maximum Size	6'	2.5'	1.3'	3

- B. Rock Weight - The dry unit weight of each rock shall be 145 lbs/cu ft or greater. No rock used in a stacked rock wall shall weigh less than 0.75 tons.
- C. Rock fragments shall be angular, flat, or cubed in shape. Uniform, flat rock is best for top level rocks while rocks with more roundness can be used as footer rocks.
- D. Stackable rock that will need to be flat on top and bottom ranging from 0.75 to 3 tons. The rock shall be hard sandstone material, rectangular in shape and between 0.75 ft and 1.3 ft in thickness. The rock shall be 2 ft to 2.5 ft wide and between 3 ft and 6 ft in length.

Part 3 – EXECUTION

12.30 CONSTRUCTION METHODS

- A. Equipment Placed Stacked Rock:
1. This application shall involve the placement of large, flat rock near an eroded streambank slope in such a manner that the stacked rock creates a “terraced rock wall” appearance. The rocks will be dry stacked and have a taper slightly towards the existing streambank.
 2. The area between the stacked rock wall and the existing streambank will be backfilled with a mixture of fill soil and gravel from the stream or that is stockpiled.
 3. The gravel under the first course of rocks shall be removed to expose the underlying bedrock.
 4. All rocks shall have maximum contact between the individual rocks without bridging or otherwise creating a void under the rock layer. The rock shall be firmly bedded by machinery.
 5. Rock sills shall be constructed no less than every 25 feet between the stacked rock and the bank slope using 12” rip-rap.
 6. As the stacked rock wall is constructed, the **CONTRACTOR** shall place bare root seedlings (provided by the **ENGINEER**) and other live stakes in between the rocks as they are placed.
 7. If applicable, at the upper limit of the stacked rock section, the stacked rock shall be keyed into the stable bank as shown on the Drawings. Keying of the stacked rock provides protection from erosion occurring behind the stacked rock structure.
 8. The **ENGINEER** will conduct oversight, and because rocks are varied in size and shape, this activity will include some Field Engineering.

- B. All activities will need to act in conjunction with existing and planned infrastructure that does not negatively affect their form of function

Contract - Bid 21-50
Tanglewood Branch Restoration
Appendix A - City Bid Package

13.00 STREAMBANK FILLING, GRADING, AND SHAPING

Part 1 – GENERAL

13.10 DESCRIPTION

- A. Eroding streambanks are restored using a combination of methods including Stacked Rock and Soil Mattresses. In order to achieve a fully restored streambank, materials in the form of gravels and soils must be placed in a manner that creates the sub-grade and finished grade of the streambank. This section describes the methods and materials that will be utilized to create a streambank with a natural appearance and proper geomorphologic function.

13.11 RELATED SECTIONS

- A. UNIT PRICES
- B. TEMPORARY ENVIRONMENTAL CONTROLS
- C. SITE WORK
- D. SITE FINISHING
- E. STREAM OR RIVER CHANNEL AND FLOODPLAIN EXCAVATION

13.12 UNIT PRICES

- A. Payment for this item shall be made on a unit price basis as established in the bid documents. Such payment shall constitute full compensation for all labor, equipment, tools, disposal and all other items incidental to the completion of the work. Compensation for any item of work described in the contract, but not listed in the Bid Schedule, will be included in the payment for the item of work to which it is made subsidiary. Unit prices for work covered under this section are defined previously in the UNIT PRICES section of these specifications, including incidentals, related work, method of measurement, and partial payment provisions, if any.

13.13 QUALITY ASSURANCE

- A. Work under this section shall be performed by workers trained and experienced in this type of work, specifically building river channels with correct geomorphic features. Work under this section shall be performed in the presence of the **ENGINEER**.
- B. The **CONTRACTOR** is responsible for reviewing all drawings, specifications and site conditions to become familiar with the requirements.

13.14 SUBMITALS

- A. Prior to commencement of any work, the **CONTRACTOR** shall review with the **ENGINEER** the sequence and methods of construction the **CONTRACTOR** will use to complete the work. The sequence and methods for cutting, filling and grading of existing materials, as well as the method and sequence of operations for excavation of borrow materials from specified areas shall be reviewed. Such discussions shall include the order of work and equipment to be used. The **ENGINEER** retains the right to make a final determination on the **CONTRACTOR**'s proposed work plan. The **ENGINEER** may designate alternate borrow areas during progression of the work. Any alternate borrow areas will be reviewed with the **CONTRACTOR** and will meet the conditions as set forth in this section.

Part 2 – PRODUCTS

13.20 MATERIALS

- A. Streambank Filling will utilize three primary types of material. 1) gravel material excavated from the stream channel or from offsite, 2) a mix of soil, sand, and gravel generated during excavation of new stream channels and 3) topsoil
- B. In cases where additional fill is required, the **ENGINEER** will identify suitable borrow areas in the project site area. After removal of the required material from the borrow area, the **CONTRACTOR** will grade the site and establish a vegetative cover as designated in Part 3 below.
- C. In some instances, borrow areas will be excavated and left as wetland ponds. In these cases, the borrow-area pond will be constructed such that the side slopes do not exceed 3:1 and with a depth of no less than two feet (2').
- D. When a borrow area is not available, fill may be required from off-site sources. The type and quality of fill, as may be required, are set forth in the Drawings.
- E. When fill materials are stockpiled at the site, sediment control may be required by the **ENGINEER** and/or regulatory agencies. The requirement for sediment control during the material storage period is determined on a case by case basis. The **CONTRACTOR** should be prepared to install adequate sediment control as specified in Temporary Environmental Controls section of these specifications.
- F. Top soil shall be screened loam soil free of sod, brush, roots, or other debris. Material shall be appropriate for establishment of vegetation, well drained and rich in organic material as approved by the **ENGINEER**
- G. Fill soil shall be soil suitable for fill behind structures and to achieve grade at sublevels below top soil. Material shall be well drained as approved by the **ENGINEER**
- H. Clay material shall have a low hydraulic conductivity appropriate for impounding water behind revetment and grade control structures as approved by the **ENGINEER**
- I. River Cobble shall be smooth, river cobble to serve as fill within a stream with 80% of material median diameter greater than 64 mm as approved by the **ENGINEER**
- J. Sorted creek grade gravel will be coarse creek gravel material to serve as structural fill

behind revetment structures. Material shall have a median diameter of 22 mm – 64 mm as approved by the **ENGINEER**

Part 3 – EXECUTION

13.30 CONSTRUCTION

- A. As the streambank is constructed, generally low quality materials are used as the core fill of the streambank. These materials shall be placed at low elevations near the eroding or existing edge of the streambank being restored. Materials that can be used in this portion of the work are generally generated onsite through channel excavation but may also include imported fill material the meets the requirements of the **ENGINEER**.
- B. All final grades will be achieved by placement of at least 1' of topsoil above a subgrade of lesser quality fill material.
- C. The finished grade will have 10% by volume of mushroom compost mechanically mixed into the topsoil during final grading.
- D. No finished slopes shall exceed a 3:1 (h:v) slope unless specifically directed by the **ENGINEER**.
- E. Finished grades shall be leveled and smooth to form a uniform surface for placing erosion control fabric.
- F. All activities will need to act in conjunction with existing and planned infrastructure that does not negatively affect their form of function
- G. The **CONTRACTOR** shall at all times conduct the work in full compliance with all OSHA regulations and any other applicable local, state or federal regulations.

13.31 SITE STABILIZATION

- A. The **CONTRACTOR** shall be responsible for providing stabilization of all disturbed areas immediately after the completion of grading. Stabilization will be either temporary or permanent in nature.

14.00 STONE REVETMENT

Part 1 – GENERAL

14.10 DESCRIPTION

- A. Rock Revetment shall be constructed of a mix of “Shot Rock” that will line the left and right streambank and serve to protect existing streambanks by reducing shear stress while creating a channel width and dimension that is needed for the specified capacity. These are constructed as indicated in the Drawings and largely as directed by the supervision of the **ENGINEER** using **FIELD ENGINEERING** methods or in order to provide a protected, and aesthetically natural streambank fill.

14.11 RELATED SECTIONS

- A. UNIT PRICES
- B. FIELD ENGINEERING
- C. SITE WORK
- D. SITE FINISHING
- E. ROCK RIFFLE GRADE CONTROL AND BOULDER CLUSTERS
- F. STREAMBANK FILLING, GRADING, AND SHAPING

14.12 UNIT PRICES

- A. Payment for this item shall be made on a unit price basis as established in the bid documents. Such payment shall constitute full compensation for all labor, equipment, tools, disposal and all other items incidental to the completion of the work. Compensation for any item of work described in the contract, but not listed in the Bid Schedule, will be included in the payment for the item of work to which it is made subsidiary.

14.13 QUALITY ASSURANCE

- A. Work under this section shall be performed by workers trained and experienced in this type of work, specifically building stream channels with correct geomorphic features. Work under this section shall be performed in the presence of the **ENGINEER**.
- B. The **CONTRACTOR** is responsible for reviewing all drawings, specifications and site conditions to become familiar with the requirements.

Part 2 - PRODUCTS

14.20 QUALITY

- A. Rock shall be a mix of aesthetically natural cobble and boulder shot rock.

- B. Rock should be of sufficient hardness to resist weathering and shall be free of cracks and other blemishes. Porous rock such as some limestones and soft rock such as shales are not allowed. In some cases, native rock present on the site may be authorized for use by the **ENGINEER**. In no instance will concrete or other “debris” be allowed.
- C. Rock that meets the specifications for the construction of rock revetment will be placed in a specific location on site by the **ENGINEER**. The **CONTRACTOR** shall coordinate with the **ENGINEER** prior to revetment construction to ensure that the correct rock is used.

14.21 ROCK SIZE, WEIGHT AND SHAPE

- A. Rock used for the construction of rock revetment will meet the following size requirements. All units are shown in feet (ft) and pounds (tons).

	A-Axis	B-Axis	C-Axis	Weight (ton)
Minimum Size	0.5'	0.5'	0.5'	0.1
Maximum Size	5'	3'	3.5'	5

- B. Rock Weight - The dry unit weight of each rock shall be 145 lbs/cu ft or greater.
- C. Rock shall be a wide range of size and shape of native rock to serve as revetment with a mix of weight between 0.1 to 3.0 tons. No less than 20% greater than 2 tons, 30% between 1 and 2 tons, 30% between 0.5 and 1 ton, and 20% between 0.1 and 0.5 tons. The rock shall be sandstone material of mixed “shot” rock. The rock shall be 0.5 ft to no more than 3.5 ft in width, 0.5 ft. to 3 ft. in thickness, and 0.5 ft. to 5 ft. in length

Part 3 – EXECUTION

14.30 CONSTRUCTION METHODS

- A. Rock structures shall be installed according to the Drawings or Field Engineered due to the variety of sizes and shapes of rocks. All rock installation will be done in the presence of the **ENGINEER**.
- B. The construction of rock structures requires equipment which can place rock in precise locations. A suitable sized excavator with a hydraulic thumb is required.
- C. Generally low quality materials are used in the core of the rock revetment fill. These shall be placed at low elevations near the eroding or existing edge of streambank.
- D. Large revetment boulders will be placed in sections as designated by the **ENGINEER**, but generally where the stream bends and shear stress is increased
- E. Smaller revetment stone can be used in straight channel sections
- F. The top elevation will tie into the existing streambanks as indicated in the Drawings. Terrace elevations and slope will be designated by the **ENGINEER** or Drawings. Some sections of will have topsoil and erosion control materials placed on top of the revetment rock.

- G. Native trees and shrubs will be placed in the revetment rock structures where possible to assist in energy dissipation.
- H. Surrounding and planned design infrastructure will be protected and revetment rock will be placed in a manner that both ties into and does not negatively affect their form and function.

Contract - Bid 21-50
Tanglewood Branch Restoration
Appendix A - City Bid Package

15.00 CONCRETE AND ASPHALT REMOVAL

Part 1 – GENERAL

15.10 DESCRIPTION

- A. Concrete that is lying within the channel and along streambanks will be removed by the **CONTRACTOR** under the direction of the **ENGINEER**. Debris will need to be delicately removed to reduce disturbance of existing soil and other features. The **CONTRACTOR** will determine the number of hours and equipment needed based on the square feet of concrete material estimated by the **ENGINEER**.

15.11 RELATED SECTIONS

- A. UNIT PRICES
- B. SITE WORK
- C. SITE FINISHING
- D. STREAMBANK FILLING, GRADING, AND SHAPING

15.12 UNIT PRICES

- A. Payment for this item shall be made on a unit price basis as established in the bid documents. Such payment shall constitute full compensation for all labor, equipment, tools, disposal and all other items incidental to the completion of the work. Compensation for any item of work described in the contract but not listed in the Bid Schedule, will be included in the payment for the item of work to which it is made subsidiary.

15.13 QUALITY ASSURANCE

- A. Work under this section shall be performed by workers trained and experienced in this type of work, specifically building stream channels with correct geomorphic features. Work under this section shall be performed in the presence of the **ENGINEER**.
- B. The **CONTRACTOR** is responsible for reviewing all drawings, specifications and site conditions to become familiar with the requirements.

Part 2 – PRODUCTS

Not Used

Part 3 – EXECUTION

15.30 REMOVAL METHODS

- A. The removal of debris requires removal of material from precise locations in a sensitive manner to reduce disturbance to the existing channel and streambank. A suitable sized excavator with a hydraulic thumb is required.

- B. Surrounding and planned design infrastructure will be protected and material will be removed in a manner that does not negatively affect existing infrastructure and design.

Contract - Bid 21-50
Tanglewood Branch Restoration
Appendix A - City Bid Package

16.00 MATERIALS AND PROCUREMENT ITEMS

Part 1 – GENERAL

15.14 DESCRIPTION

- A. Materials required for construction are listed here.

15.15 RELATED SECTIONS

- A. UNIT PRICES
- B. STREAM OR RIVER CHANNEL AND FLOODPLAIN EXCAVATION
- C. ROCK RIFFLE GRADE CONTROL AND BOULDER CLUSTERS
- D. SOIL MATTRESSES
- E. STACKED ROCK WALL
- F. STONE ROCK REVETMENT
- G. STREAMBANK FILLING, GRADING, AND SHAPING
- H. SITE FINISHING
- I. TEMPORARY ENVIRONMENTAL CONTROLS

15.16 UNIT PRICES

- A. Payment for these item shall be made on a unit price basis as established in the bid documents. Such payment shall constitute full compensation for all labor, equipment, tools, disposal and all other items incidental to the completion of the work. Compensation for any item of work described in the contract, but not listed in the Bid Schedule, will be included in the payment for the item of work to which it is made subsidiary.

15.17 QUALITY ASSURANCE

- A. Materials under this section shall be procured by the **CONTRACTOR**. All materials will need to match the description of items needed listed below and in the previous sections. Items will be subject to approval by the **ENGINEER**.
- B. The **CONTRACTOR** is responsible for reviewing all drawings, specifications and site conditions to become familiar with the requirements.

Part 2 – PRODUCTS

Item #	Item	Unit	Est. Qty.	Product Description
Rock and Earthwork Materials				
20	Top Soil	C.Y.	100	Top soil shall be screened loam soil free of sod, brush, roots, or other debris. Material shall be appropriate for establishment of vegetation, well drained and rich in organic material.
21	Fill Soil	C.Y.	65	Fill soil shall be soil suitable for fill behind structures and to achieve grade at sublevels below top soil. Material shall be well drained
22	Clay	C.Y.	20	Clay material shall have a low hydraulic conductivity appropriate for impounding water behind revetment and grade control structures.
23	Medium-Large Native Boulders	Ton	340	A variety of medium to large native boulders for Tanglewood Tributary with flat tops and bottoms ranging from 50% at 1 to 2.5 tons and 50% 2.5 tons to 4 tons. The rock shall be hard sandstone material. Rock shall have a weight ranging from one to four tons. The rock shall be 2ft to 4ft wide, between 3 ft and 6 ft in length, and 1.5 ft to 2 ft in thickness. The top and bottom shall be generally flat for stacking
24	Large Native Boulders	Ton	360	Large Native boulders for main Tanglewood Branch with flat tops and bottoms. The rock shall be hard sandstone material, very flat with a low center of gravity. The rock shall have a weight ranging from two to four tons. The rock shall be rectangular in shape and between 1.5 ft. and 2 ft. in thickness. The rock shall be 3 ft. to 5 ft. wide and between 4 ft. and 8 ft. in length. The top and bottom of the rock shall be generally flat for stacking.
25	Flat Native Stone	Ton	290	Stackable rock that will need to be flat on top and bottom ranging from 0.75 to 3 tons. The rock shall be hard sandstone material, rectangular in shape and between 0.75 ft and 1.3 ft in thickness. The rock shall be 2ft to 2.5ft wide and between 3ft and 6ft in length
26	Native Stone (Shot Rock)	Ton	120	A wide range of size and shape of native rock to serve as revetment with a mix of weight between 0.1 to 3.0 tons. No less than 20% greater than 2 tons, 30% between 1 and 2 tons, 30% between 0.5 and 1 ton, and 20% between 0.1 and 0.5 tons. The rock shall be sandstone material or mixed "shot" rock. The rock shall be 0.5 ft to no more than 3.5 ft in width, 0.5 ft. to 3 ft. in thickness, and 0.5 ft. to 5 ft. in length
27	River Cobble	Ton	70	A range of small smooth river cobble to fill within the stream with 80% of materials B-axis > 64mm
28	Sorted Creek Gravel	Ton	50	Sorted coarse creek gravel material to serve as structural fill behind revetment B-Axis of 22 mm - 64 mm
Erosion Control Materials				
29	BioD-Blocks 16"	E.A.	36	10-ft long, 16-in tall and 9-thick densely packed mattress coir block with woven coir fabric attached. Three sides of the coir fiber block is wrapped with woven coir fabric and free ends of woven coir fabric is extended from top and bottom of the coir fiber block. Each block has a male and a female end for secure connection. The block has invisible holes in the middle of the coir block. Fabric length top - 28 in, Fabric length bottom - 56 in, Fabric length female end - 6 in. Tensile strength of fabric Machine Direction - 1740 lbs/ft, Cross Direction - 1176 lbs/ft. Unit Weight - 4.8 lbs/ft
30	Coir wattles 6"	E.A.	18	6 in (15 cm) diameter cylindrical shape rolls, with 2 in x 2 in (5 cm x 5 cm) knotted, high strength outer netting made of 60 lbs. (267 N) strength machine spun bristle coir twines. Lightly packed with cleaned mattress coir fiber in a uniform manner to filter sediment effectively. Made to 15 ft. long sections. Tensile Strength twine - 60lbs, Mesh opening 2 in x 2 in, Unit weight 0.6 lbs/ft, density 3.4 lbs/cu ft, and 100% coconut fiber
31	Coir Wattles 9"	E.A.	5	9 in (23 cm) diameter cylindrical shape rolls, with 2 in x 2 in (5 cm x 5 cm) knotted, high strength outer netting is made of 60 lbs. (267 N) strength machine spun bristle coir twines. Lightly packed with cleaned mattress coir fiber in a uniform manner to filter sediment effectively. Made to 15 ft. long sections. Mesh opening 2 in x 2 in, unit weight 1.5 lbs/ft, density 3.4 lbs/cu ft, 100% coconut fiber
32	Coir Wattles 12"	E.A.	10	12 in (30 cm) diameter cylindrical shape rolls, with 2 in x 2 in (5 cm x 5 cm) knotted, high strength outer netting is made of 90 lbs. (400 N) strength machine spun bristle coir twines. They are lightly packed with cleaned mattress coir fiber in a uniform manner to filter sediment effectively. Made to 10 ft. long sections. Mesh opening 2 in x 2 in, unit weight 3 lbs/ft, density 3.8 lbs/cu ft, 100% coconut fiber
33	Compost	C.Y.	25	Mushroom compost free of viable seed
34	Coir Fabric	S.Y.	480	13.1 ft x 83 ft coir fabric that has a weight of 29 oz/ SY, dry tensile strength machine direction of 2024 lbs/ft and cross direction dry tensile strength of 1160 lbs/ft. Weight tensile strength machine direction of 1776 lbs/ft and 936 cross direction tensile strength 936 lbs/ft. A thickness of 0.5 in, minimum twine count MD x CD per foot of 39 x 18
35	Coir Fabric	S.Y.	240	6.56 ft x 166 ft that has a weight of 29 oz/ SY, dry tensile strength machine direction of 2024 lbs/ft and cross direction dry tensile strength of 1160 lbs/ft. Weight tensile strength machine direction of 1776 lbs/ft and 936 cross direction tensile strength 936 lbs/ft. A thickness of 0.5 in, minimum twine count MD x CD per foot of 39 x 18
36	Filter Fabric	S.Y.	500	12.5 ft x 360 ft Mirafi 600x Geotextile woven fabric or a fabric of equivalent strength and quality. Grab Tensile Strength MD of 315 lbs, CD of 315 lbs, Grab Tensile Elongation of 15%, Trapezoidal Tear Strength of MD 113 lbs or CD of 113 lb, CBR puncture strength of 900 lbs, Apparent Maximum opening size of 40 mm, Permittivity of 0.05/s, Flow rate of 4.0 gal/min/sf, UV resistance of 70 %
37	Straw Bales	E.A.	120	Straw bales
38	18" Wedge Stakes	E.A.	2240	Stakes will be hard oak, 17 1/2" in height, 1 3/8" in width, and 2 3/4" in length on top. The bottom of the stake will form a triangle from the top. Additional details are presented in Drawing # 1 18" Wooden Stake Design
39	22" Wedge Stakes	E.A.	360	Stakes will be hard oak, 22" in height, 1 3/8" in width, and 2 3/4" in length on top. The bottom of the stake will form a triangle from the top. Additional details are presented in Drawing # 3 22" Wooden Stake Design
40	Notch Stakes	E.A.	1700	Stakes will be hard oak, 11 7/8" in height, 1 1/2" in width, and 1 3/8" in length. A notch will form at the top of the stake and a pyramid at the bottom according to dimensions presented in Drawing # 2 Notch Stake Design

Part 3 – EXECUTION

Not Used

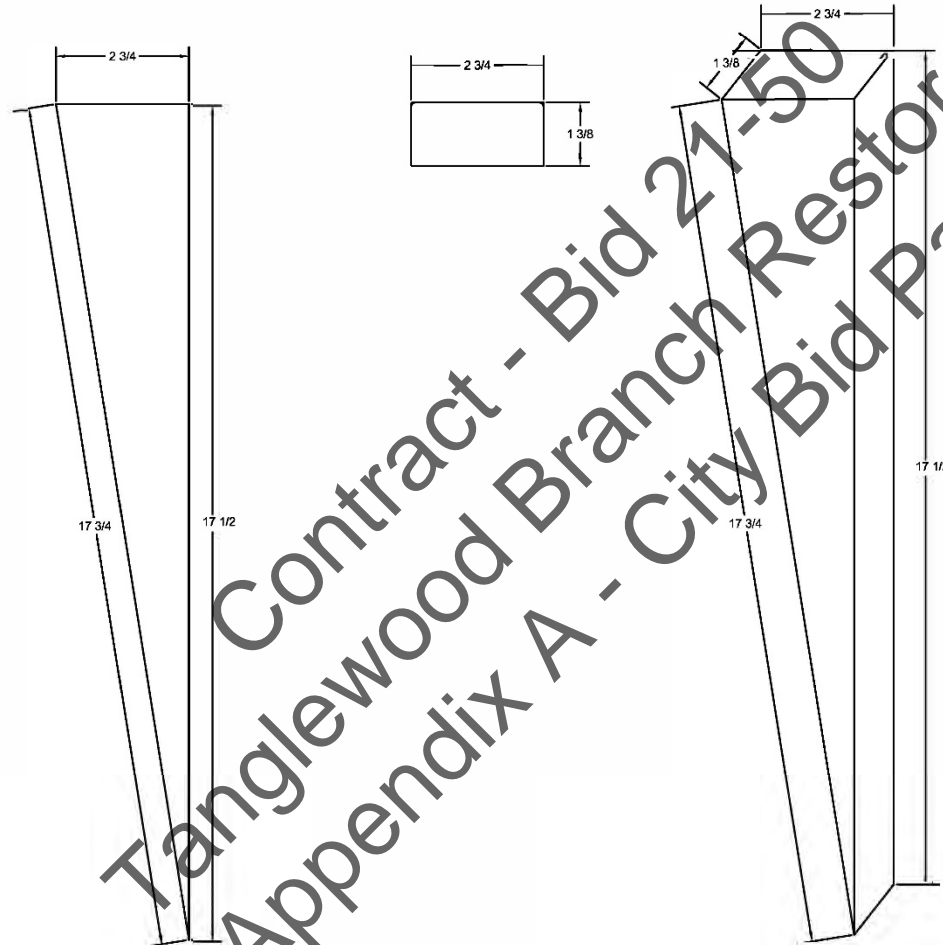
Contract - Bid 21-50
Tanglewood Branch Restoration
Appendix A - City Bid Package

Tanglewood Branch Stream Enhancement
Drawing # 1
18" Wooden Stake Design

Profile View

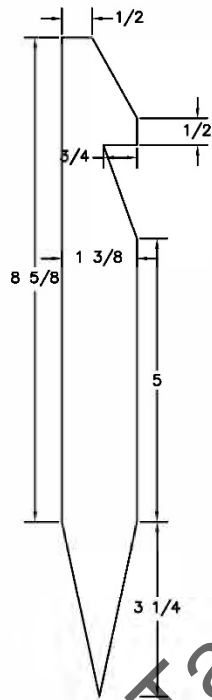
Plan View

3D View

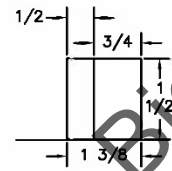


Tanglewood Branch Stream Enhancement
Drawing #2
Notch Stake Design

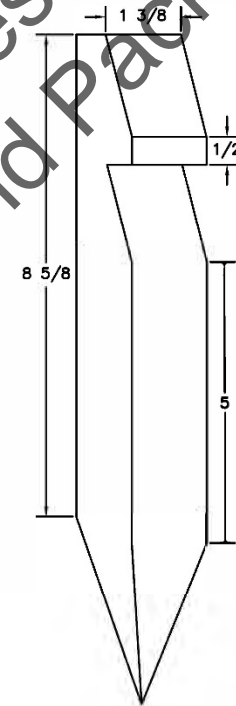
Profile View



Plan View

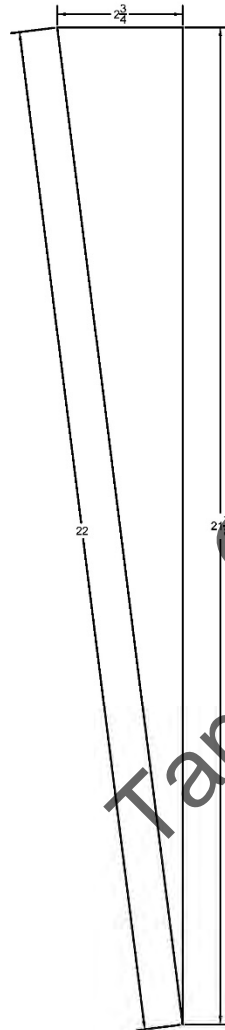


3D View

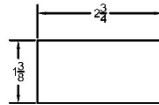


Tanglewood Branch Stream Enhancement
Drawing # 3
22" Wooden Stake Design

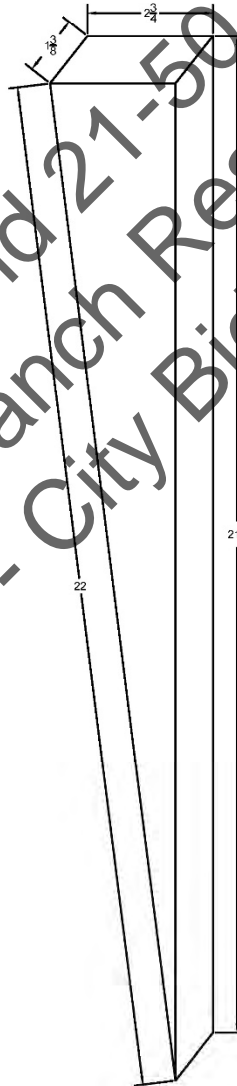
Profile View



Plan View



3D View



Contract - Bid 21-50
Tanglewood Branch Restoration
Appendix A - City Bid Package



Bid 21-50, Construction – Tanglewood Branch Restoration
Appendix A: Contract Provisions for Non-Federal Entity Contracts Under Federal Awards
CODE OF FEDERAL REGULATIONS
TITLE 2 – GRANTS AND AGREEMENTS
PART 200, APPENDIX II

Appendix A: Appendix II to Part 200 – Contract Provisions for Non-Federal Entity Contracts Under Federal Awards

[Appendix II to Part 200, Title 2 – Contract Provisions for Non-Federal Entity Contracts Under Federal Awards](https://www.govinfo.gov/content/pkg/CFR-2021-title2-vol1/pdf/CFR-2021-title2-vol1-part200.pdf)
<https://www.govinfo.gov/content/pkg/CFR-2021-title2-vol1/pdf/CFR-2021-title2-vol1-part200.pdf>

Contractors shall comply with the following federal guidelines, in accordance with the most recent published version of **Appendix II to Part 200—Contract Provisions for Non-Federal Entity Contracts Under Federal Awards**. The definition of a “non-Federal entity” in this section shall mean the City of Fayetteville, AR. Language in this Appendix shall override and supersede any language contained in the bid documents.

1. Termination for Cause and Convenience

- a. The City of Fayetteville reserves the right to cancel this Contract, without cause, by giving thirty (30) days’ notice to the contractor of the intent to cancel, or with cause if at any time the contractor fails to fulfill or abide by any of the terms or conditions specified. This Agreement shall be automatically terminated in the event that funds under federal award, number are discontinued by the awarding agency for any reason. Such termination shall take effect upon receipt of written notice. If there is a need to settle on an early termination, partial payment up to the termination date would be determined by incurrence of allowable cost, by completion of task, by percent of time completed up to the settlement, or some other method as defined by the City upon review of the contractor’s records.
- a. Failure of the contractor to comply with any of the provisions of this contract shall be considered a material breach of contract and shall be cause for immediate termination of the contract at the discretion of the City of Fayetteville.
- b. In addition to all other legal remedies available to the City of Fayetteville, the City reserves the right to cancel and obtain from another source any services which have not been provided within the period of time stated in the proposal, or if no such time is stated, within a reasonable period of time from the date of order or request, as determined by the City.

2. Equal Employment Opportunity – Contractor shall comply with 41 CFR 60–1.4(b)

- a. During the performance of this contract, the contractor agrees as follows:
 - (1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. 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, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be 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 contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.
- (3) The contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the contractor's legal duty to furnish information.
- (4) The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- (5) The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
- (6) The contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
- (7) In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
- (8) The contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (8) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance:
- a. Provided, however, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency, the contractor may request the United States to enter into such litigation to protect the interests of the United States.
 - b. The applicant further agrees that it will be bound by the above equal opportunity clause with respect to its own employment practices when it participates in federally assisted construction work: Provided, That if the applicant so participating is a State or local government, the above equal opportunity clause is not applicable to any agency, instrumentality or subdivision of such government which does not participate in work on or under the contract.
 - c. The applicant agrees that it will assist and cooperate actively with the administering agency and the Secretary of Labor in obtaining the compliance of contractors and

subcontractors with the equal opportunity clause and the rules, regulations, and relevant orders of the Secretary of Labor, that it will furnish the administering agency and the Secretary of Labor such information as they may require for the supervision of such compliance, and that it will otherwise assist the administering agency in the discharge of the agency's primary responsibility for securing compliance.

- d. The applicant further agrees that it will refrain from entering into any contract or contract modification subject to Executive Order 11246 of September 24, 1965, with a contractor debarred from, or who has not demonstrated eligibility for, Government contracts and federally assisted construction contracts pursuant to the Executive Order and will carry out such sanctions and penalties for violation of the equal opportunity clause as may be imposed upon contractors and subcontractors by the administering agency or the Secretary of Labor pursuant to Part II, Subpart D of the Executive Order. In addition, the applicant agrees that if it fails or refuses to comply with these undertakings, the administering agency may take any or all of the following actions: Cancel, terminate, or suspend in whole or in part this grant (contract, loan, insurance, guarantee); refrain from extending any further assistance to the applicant under the program with respect to which the failure or refund occurred until satisfactory assurance of future compliance has been received from such applicant; and refer the case to the Department of Justice for appropriate legal proceedings.
 - b. Subcontracts. Each nonexempt prime contractor or subcontractor shall include the equal opportunity clause in each of its nonexempt subcontracts.
 - c. Inclusion of the equal opportunity clause by reference. The equal opportunity clause may be included by reference in all Government contracts and subcontracts, including Government bills of lading, transportation requests, contracts for deposit of Government funds, and contracts for issuing and paying U.S. savings bonds and notes, and such other contracts and subcontracts as the Director of OFCCP may designate.
 - d. Incorporation by operation of the order. By operation of the order, the equal opportunity clause shall be considered to be a part of every contract and subcontract required by the order and the regulations in this part to include such a clause whether or not it is physically incorporated in such contracts and whether or not the contract between the agency and the contractor is written.
 - e. Adaptation of language. Such necessary changes in language may be made in the equal opportunity clause as shall be appropriate to identify properly the parties and their undertakings.
3. **Davis-Bacon Act**, (40 U.S.C. 3141–3144, and 3146–3148) as supplemented by Department of Labor regulations ([29 CFR Part 5, "Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction"](#))
- a. See also [2 C.F.R. Part 200, Appendix II, 1.D.](#)
 - b. In accordance with the statute, contractors must be required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor. In addition, contractors must be required to pay wages not less than once a week.
 - c. The non-Federal entity must place a copy of the current prevailing wage determination issued by the Department of Labor in each solicitation. The decision to award a contract or subcontract must be conditioned upon the acceptance of the wage determination. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency.
 - i. Contractor shall reference Appendix B containing Wage Determination Number AR20200002 dated 01/01/2021.
4. **Copeland "Anti-Kickback" Act** (40 U.S.C. 3145), as supplemented by Department of Labor regulations (29 CFR Part 3, "Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States").
- a. Each contractor or subrecipient shall be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is

otherwise entitled. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency.

- i. The contractor shall comply with 18 U.S.C. § 874, 40 U.S.C. § 3145, and the requirements of 29 C.F.R. pt. 3 as may be applicable, which are incorporated by reference into this contract.
- ii. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clause above and such other clauses as may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all of these contract clauses.
- iii. Breach. A breach of the contract clauses above may be grounds for termination of the contract, and for debarment as a contractor and subcontractor as provided in 29 C.F.R. § 5.12.

5. Contract Work Hours and Safety Standards Act

- a. Where applicable (see 40 U.S.C. § 3701), all contracts awarded by the non-Federal entity in excess of \$100,000 that involve the employment of mechanics or laborers must include a provision for compliance with 40 U.S.C. §§ 3702 and 3704, as supplemented by Department of Labor regulations at 29 C.F.R. Part 5. See 29 C.F.R. Part 200, Appendix II, ¶ E.
- b. Under 40 U.S.C. § 3702, each contractor must be required to compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the work week.
- c. The requirements of 40 U.S.C. § 3704 are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous. These requirements do not apply to the purchases of supplies or materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.
- d. Compliance with the Contract Work Hours and Safety Standards Act
 - ii. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
 - iii. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1) of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1) of this section.
 - iv. Withholding for unpaid wages and liquidated damages. The (write in the name of the Federal agency or the loan or grant recipient) shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2) of this section.
 - v. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1) through (4) of this section and a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any

subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1) through (4) of this section.”

6. **Rights to Inventions Made Under a Contract or Agreement:** If the Federal award meets the definition of “funding agreement” under [37 CFR § 401.2 \(a\)](#) and the recipient or subrecipient wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that “funding agreement,” the recipient or subrecipient must comply with the requirements of [37 CFR Part 401](#), “Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements,” and any implementing regulations issued by the awarding agency.
7. **Clean Air Act:** Contracts in excess of \$150,000 shall comply with the following related to the Clean Air Act
 - a. The contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq.
 - b. The contractor agrees to report each violation to the City and understands and agrees that the City will, in turn, report each violation as required to assure notification to the (name of recipient), Federal Emergency Management Agency, and the appropriate Environmental Protection Agency Regional Office.
 - c. The contractor agrees to include these requirements in each subcontract exceeding \$150,000 financed in whole or in part with Federal assistance funding.
8. **Federal Water Pollution Control Act:** Contracts in excess of \$150,000 shall comply with the following related to the Federal Water Pollution Control Act
 - a. The contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq.
 - b. The contractor agrees to report each violation to the (name of the state agency or local or Indian tribal government) and understands and agrees that the (name of the state agency or local or Indian tribal government) will, in turn, report each violation as required to assure notification to the (name of recipient), Federal Emergency Management Agency, and the appropriate Environmental Protection Agency Regional Office.
 - c. The contractor agrees to include these requirements in each subcontract exceeding \$150,000 financed in whole or in part with Federal assistance.
9. **Debarment and Suspension (Executive Orders 12549 and 12689)**
 - a. This contract is a covered transaction for purposes of 2 C.F.R. pt. 180 and 2 C.F.R. pt. 3000. As such the contractor is required to verify that none of the contractor, its principals (defined at 2 C.F.R. § 180.995), or its affiliates (defined at 2 C.F.R. § 180.905) are excluded (defined at 2 C.F.R. § 180.940) or disqualified (defined at 2 C.F.R. § 180.935).
 - b. A contract award (per [2 CFR 180.220](#)) shall not be made to parties listed on the governmentwide exclusions in the System for Award Management (SAM), in accordance with the OMB guidelines at [2 CFR 180](#) that implement Executive Orders 12549 (3 CFR part 1986 Comp., p. 189) and 12689 (3 CFR part 1989 Comp., p. 235), “Debarment and Suspension.” SAM Exclusions contains the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549.
 - c. The contractor must comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C and must include a requirement to comply with these regulations in any lower tier covered transaction it enters into.
 - d. If it is later determined that the contractor did not comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, in addition to remedies available to (name of state agency serving as recipient and name of subrecipient), the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment.
 - e. The bidder or proposer agrees to comply with the requirements of 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C while this offer is valid and throughout the period of any contract that may arise from this offer. The bidder or proposer further agrees to include a provision requiring such compliance in its lower tier covered transactions.
10. **Byrd Anti-Lobbying Amendment 31 U.S.C. § 1352 (as amended)**
 - a. Contractors who apply or bid for an award of \$100,000 or more shall file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or

employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant, or any other award covered by 31 U.S.C. § 1352. Each tier shall also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the recipient.

11. Procurement of recovered materials ([§ 200.323](#))

- a. A non-Federal entity that is a state agency or agency of a political subdivision of a state and its contractors must comply with section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at [40 CFR part 247](#) that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds \$10,000 or the value of the quantity acquired during the preceding fiscal year exceeded \$10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.

12. Prohibition on certain telecommunications and video surveillance services or equipment ([§ 200.216](#))

- a. Recipients and subrecipients are prohibited from obligating or expending loan or grant funds to:
 - i. Procure or obtain;
 - ii. Extend or renew a contract to procure or obtain; or
 - iii. Enter into a contract (or extend or renew a contract) to procure or obtain equipment, services, or systems that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. As described in [Public Law 115-232](#), section 889, covered telecommunications equipment is telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities).
 - (1) For the purpose of public safety, security of government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities).
 - (2) Telecommunications or video surveillance services provided by such entities or using such equipment.
 - (3) Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of the National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.
- b. In implementing the prohibition under [Public Law 115-232](#), section 889, subsection (f), paragraph (1), heads of executive agencies administering loan, grant, or subsidy programs shall prioritize available funding and technical support to assist affected businesses, institutions and organizations as is reasonably necessary for those affected entities to transition from covered communications equipment and services, to procure replacement equipment and services, and to ensure that communications service to users and customers is sustained.
- c. See [Public Law 115-232](#), section 889 for additional information.
- d. See also [§ 200.471](#).

13. Domestic preferences for procurements ([§ 200.322](#))

- a. As appropriate and to the extent consistent with law, the non-Federal entity should, to the greatest extent practicable under a Federal award, provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including but not limited to iron, aluminum, steel, cement, and other manufactured products). The requirements of this section must be included in all subawards including all contracts and purchase orders for work or products under this award.
- b. For purposes of this section:
 - i. "Produced in the United States" means, for iron and steel products, that all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States.

- ii. “Manufactured products” means items and construction materials composed in whole or in part of non-ferrous metals such as aluminum; plastics and polymer-based products such as polyvinyl chloride pipe; aggregates such as concrete; glass, including optical fiber; and lumber.

Contract - Bid 21-50
Tanglewood Branch Restoration
Appendix A - City Bid Package

"General Decision Number: AR20210002 01/01/2021

Superseded General Decision Number: AR20200002

State: Arkansas

Construction Type: Heavy Flood Control

Counties: Arkansas Statewide.

RIVER, HARBOR AND FLOOD CONTROL PROJECTS FOR CONSTRUCTION OF ALL RIVER, HARBOR AND FLOOD CONTROL WORK ON THE MISSISSIPPI RIVER AND TRIBUTARIES - (EXCLUDING ANY CONTRACTS FOR ANY PHASE OF CONSTRUCTION OF A LOCK AND DAM) EXCEPT THE METROPOLITAN AREAS OF PINE BLUFF, LITTLE ROCK AND FT. SMITH

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.95 for calendar year 2021 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.95 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2021. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number Publication Date
0 01/01/2021

* SUAR1991-001 12/18/1991

	Rates	Fringes
CARPENTER.....	\$ 7.25	
Laborers:		
AIR TOOL OPERATOR.....	\$ 7.25	
CHAIN SAW OPERATOR OR FILER..	\$ 7.25	
REVTMENT & DIKES.....	\$ 7.25	
UNSKILLED.....	\$ 7.25	

Power equipment operators:

ASPHALT PLANT DRYER
 OPERATOR, ASPHALT
 DISTRIBUTOR, ASPHALT
 ROLLER, BULLDOZER(ROUGH,
 INCLUDING DISC, PLOW, OR
 ROLLER), MOTOR PATROL
 (HAUL ROADS), TRENCHING
 MACHINE (18" & UNDER),
 SELF-PROPELLED ROLLER
 (EXCEPT ASPHALT, END DUMP
 EQUIPMENT (OFF HIGHWAY),
 MIXER CONCRETE UP TO 21
 CU. FT.), BOTTOM DUMP
 EUCLIDS (AND LIKE
 EQUIPMENT).....\$ 7.25 .05
 BULLDOZER (FINISHER, PUSH
 CAT & ON BARGES), MOTOR
 PATROL FINISHER, SCRAPER &
 LIKE EQUIPMENT, FRONT END
 LOADER, BACKHOE(TRACTOR
 MOUNTED)ASPHALT FINISHER
 OR SPREADING MACHINE, WELL
 POINT SYSTEM OPERATOR,
 SELF PROPELLED
 LOADER(CONVEYOR TYPE).....\$ 7.25 .05
 FIREMAN (HEAVY
 CONSTRUCTION), PILEDRIVER,
 LEADSMAN, WINCHMAN.....\$ 7.25 .05
 OILER, PUMP, GREASER,
 TRACTOR (FARM TYPE
 INCLUDING DISC, PLOW OR
 ROLLER).....\$ 7.25 .05
 PILEDRIVER OPERATOR,
 MECHANIC (HEAVY
 EQUIPMENT), CRANES,
 DERRICKS, DRAGLINES,
 WELDER, POWER SHOVELS &
 BACKHOES, MIXER (CONCRETE,
 21 CU. FT. & OVER),
 ASPHALT PLANT OPERATOR,
 TRENCHING MACHINE OVER 18".....\$ 7.75 .05

Truck drivers:

1 1/2 TONS OR LESS.....\$ 7.25
 OVER 1 1/2 TONS.....\$ 7.25

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons

resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an

interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

=====

END OF GENERAL DECISION

"

Contract - Bid 21-50
Tanglewood Branch Restoration
Appendix A - City Bid Package

Tanglewood Branch Stream Enhancement Cultural Arts Corridor Fayetteville, AR 72701

SCHEDULE OF DRAWINGS

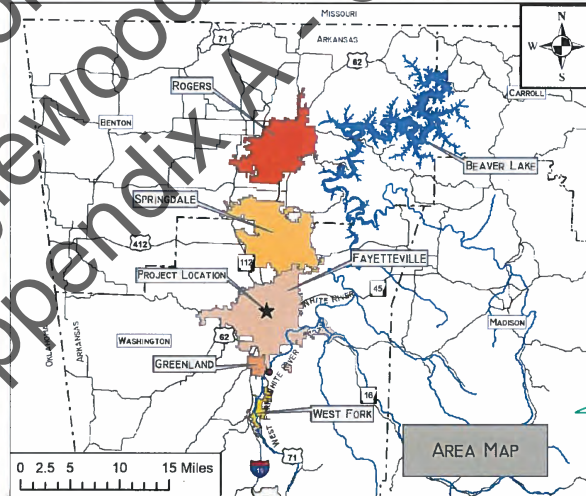
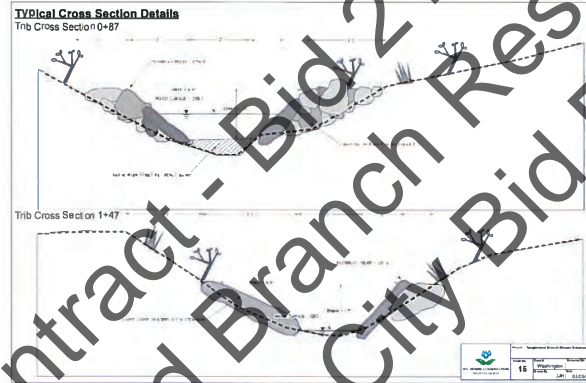
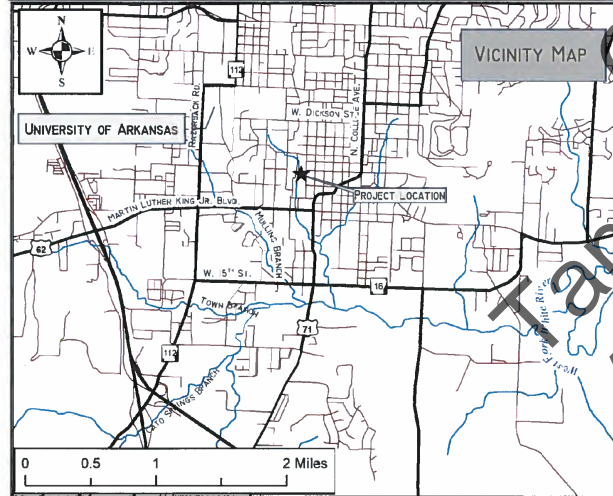
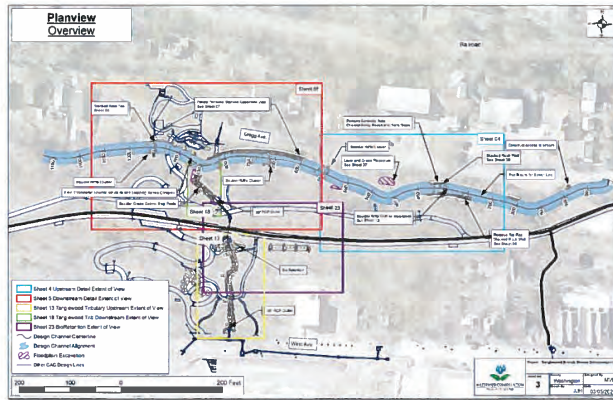
COVER SHEET.....	1
PROJECT NOTES & BID ITEMS...	2
PLAN VIEW DETAILS.....	3-5,13,18,23
CROSS SECTION DETAILS.....	6-8,14-16,19-20
LONGITUDINAL PROFILE VIEW.....	9-11,17,21,24
CONSTRUCTION DETAILS.....	12,22,25

Storm Water Pollution Prevention Plan

THIS PROJECT REQUIRES A STORM WATER POLLUTION PREVENTION PLAN (SWPPP). THE OWNER WILL PREPARE THE SWPPP AND OBTAIN THE REQUIRED PERMITS/DOCUMENTATION FROM THE ARKANSAS DEPARTMENT OF ENVIRONMENTAL QUALITY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN A COPY OF THE SWPPP ON THE PROJECT SITE. THE CONTRACTOR SHALL FOLLOW ALL PROVISIONS OF THE SWPPP AND NPDES GENERAL STORM WATER PERMIT NO. AR1150000, INCLUDING BUT NOT LIMITED TO:

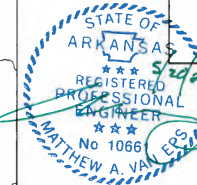
- INSTALLING AND MAINTAINING ALL BMPs AND EROSION CONTROL MEASURES
- INSPECTING AND DOCUMENTING INSPECTIONS OF ALL BMPs AND EROSION CONTROL MEASURES

ADDITIONALLY, THE CONTRACTOR SHALL BE RESPONSIBLE OF ANY ENFORCEMENT ACTIONS TAKEN OR IMPOSED BY FEDERAL OR STATE AGENCIES, INCLUDING THE COSTS OF FINES, CONSTRUCTION DELAYS AND REMEDIAL ACTIONS RESULTING FROM THE CONTRACTOR'S FAILURE TO COMPLY WITH THE PERMIT PROVISIONS.



PROJECT CONTACT INFORMATION:

PROJECT DESIGN: WATERSHED CONSERVATION RESOURCE CENTER
MATTHEW VAN EPS, P.E.
(501) 352-7294
380 W. ROCK ST.
FAYETTEVILLE, AR 72701



Project: Tanglewood Branch Stream Enhancement			
Sheet No.	County:	Designed By:	
1	Washington	MVE	
Drawn By:	Date:		
JJH	03/05/2021		

Project Notes, Pay Items, and Estimated Quantities

General Construction and Grading Notes

1. Areas disturbed by construction, including areas outside the limits of construction shall be returned to a Graded and stabilized condition at contractor's expense. Limits of construction are defined on the drawings.
2. Contractor is responsible for verifying all underground utilities prior to any excavation or digging. Engineer or owner will call the Arkansas One-Call System (1-800-482-8998) and request a utility locate prior to commencement of work.
3. Contractor shall be responsible for meeting all Arkansas Department of Environmental Quality (ADEQ) and Environmental Protection Agency (EPA) requirements for storm water management for this project.
4. Contractor shall be responsible for displaying all necessary permits on site.
5. Contractor shall notify engineer of any subgrade conditions encountered which may vary from those found during previous subgrade investigations and/or that may not have been known during design.
6. Strip, stockpile and replace topsoil in areas that are disturbed. Any stored topsoil must be surrounded by silt fence, straw wattles, or hay bales.
7. Areas disturbed by the construction, if not receiving new improvements shall be restored as shown on the plans and in the specifications. The contractor will return Roads, Material Storage Areas, and other disturbed grounds to a similar condition as they were before construction.
8. Leftover construction materials will be neatly consolidated and stacked in a location of the Engineer's request at the end of construction.

Minimum Erosion Control Requirements

1. The potential for soil loss shall be minimized by retaining natural VEGETATION wherever possible.
2. A record of the dates when grading activities occur, when construction activities TEMPORARILY or PERMANENTLY cease on a portion of the site, and when stabilization measures are INITIATED as soon as practicable on portions of the site where construction ACTIVITIES have TEMPORARILY or PERMANENTLY ceased, but in no case more than 14 days after the construction activity in that portion of the site has TEMPORARILY or PERMANENTLY ceased.
 - a. Where the initiation of stabilization measures by the 14th day after CONSTRUCTION activity TEMPORARILY or permanently ceases is precluded by snow cover, STABILIZATION measures shall be initiated as soon as practicable.
 - b. Where CONSTRUCTION activity will resume on a portion of the site within 21 days from when activities ceased, (E.G. the total time period that CONSTRUCTION activity is temporarily ceased is less than 21 days) then stabilization measures do not have to be initiated on that portion of the site by the 14th day after construction activity temporarily ceased.
3. Stabilization practices may include: temporary seeding, permanent seeding, mulching, Geotextiles, sod stabilization, vegetative buffer strips, protection of trees, and PRESERVATION of mature vegetation and other appropriate measures from when activities ceased.
4. Excavation material shall not be stored in or near streams and other storm water drainage systems where it may be washed downstream by high water or runoff. Materials, other than river gravel, temporarily placed in the stream during construction shall be removed from the channel if a rise in water is IMMINENT or forecasted to occur within 12 hours.
5. Fording of the stream is allowed. All entrances and exits from the channel must be hardened with riprap or gravel.
6. Debris, Mud, and soil shall not be allowed on public streets. If any debris, mud, or soil from the project site reaches the public street, it shall be immediately removed via sweeping or other methods of physical removal at the expense of the contractor. Debris, mud, or soil in the street may not be washed off the street or washed into the storm drainage system.
7. Any Turbid water pumped from the river channel must be discharged to a detention system or pumped through a dewatering bag at the contractors expense.
8. Diversion channels shall be constructed around work areas when practical and when directed by the project manager or engineer.
9. Contractor is required perform construction activities with awareness and intent to minimize generating in-stream turbidity beyond the level that cannot otherwise be avoided, due to the nature of river restoration construction ACTIVITIES.

10. Materials required for erosion control will be procured by the engineer. The contractor is required to assist in the installation of any necessary stabilization practices.

Pay Item and Estimated Quantity Notes

1. The Contractor is responsible for reviewing the requirements of Temporary environmental controls specification. All efforts described in the temporary environmental controls specification and the notes above shall be executed by the contractor as needed during the COURSE of Executing the WORK.
2. Excavation, shaping, and grading ITEM includes all effort required to achieve specified channel dimensions. This includes all Excavation, relocation of materials, temporary storage of materials, grading, and shaping of channel materials. Estimated volume is based on In-Situ Conditions and represents volume of material to be handled in order to achieve specified channel dimensions.
3. Contractor shall construct all rock structures to written specifications and drawings. All structures will be footed to bedrock. When footing rocks to bedrock, portions of the submerged structure may not be directly visible. If the contractor is unable to construct the structures to specifications, the work area may be dewatered.
4. A 3rd party will install soil mattresses for filling and Contractor will need to co-ordinate with the 3rd party to build the mattresses efficiently.
5. All Rock ReVetment will be constructed on bedrock. Design specifications will be provided by the engineer for use in the excavations.
6. See written specifications for site finishing and Clean-Up Expectations for contractor.
7. WORK listed on drawings and not included as a separate pay item shall be considered incidental and the cost shall be included in the price bid for other items.

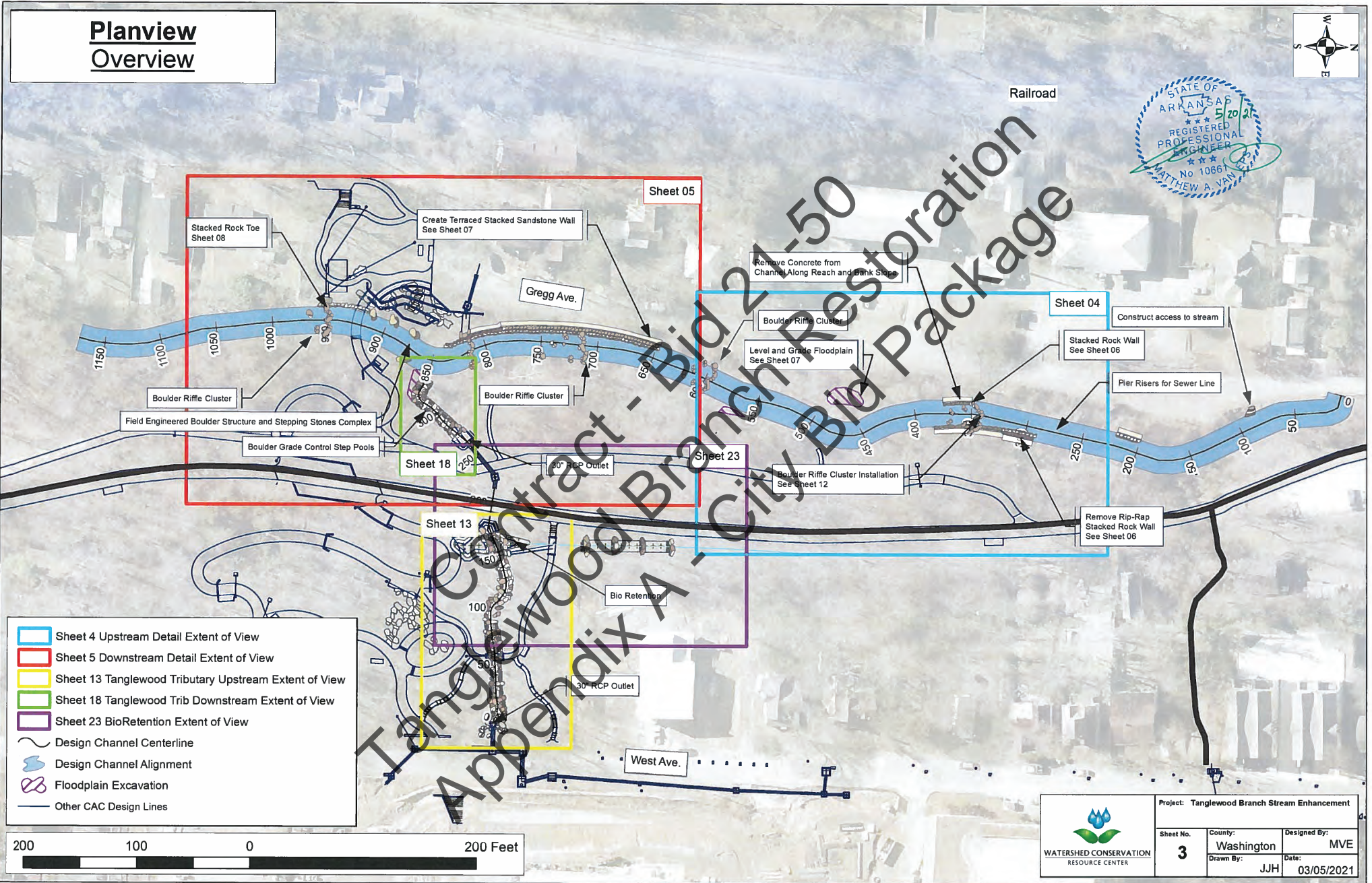
Pay Items

Item #	Description	Unit	Est. Qty.
Bid Schedule			
1	Mobilization (not to exceed 5% of total bid amount)	L.S.	1
2	Bonds and insurance	L.S.	1
3	River Channel and Floodplain Excavation / Channel Shaping / Streambank Filling, Shaping and Grading	Plan QTY (yd3)	120
4	Rock Riffle Grade Control Main Channel	E.A.	5
5	Rock Riffle Grade Control Tributary	E.A.	28
6	Boulder Clusters	E.A.	16
7	Field Engineered Boulder Structure	E.A.	4
8	Rip Rap Removal	C.Y.	6
9	Concrete Excavation and Removal from Channel	C.Y.	50
10	Installation of soil mattresses - complete in place per specifications and drawings	L.F.	350
11	Single Rock Toe Bench	L.F.	90
12	Double Rock Toe Bench	L.F.	60
13	Triple Stack Rock Toe Bench	L.F.	70
14	Four Stack Rock Toe Bench	L.F.	150
15	Native Stone Revetment	C.Y.	60
16	General Excavation: Excavator (16,000 lbs) - work outside scope of specific bid items (Equipment, Fuel, and Operator) (Based on equipment hours)	Hour	40
17	General Excavation Skid Steer - work outside scope of specific bid items Skid Steer (Equipment, Fuel, and Operator) (Based on equipment hours)	Hour	40
18	General Labor	Hour	40
19	Site Clean-Up including debris removal, grading and mechanical raking of storage areas, loading of excess construction materials on 3rd party trucks	L.S.	1
Deductive Alternative 1 - Rock and Earthwork Materials			
20	Top Soil	C.Y.	100
21	Fill Soil	C.Y.	65
22	Clay	C.Y.	20
23	Medium-Large Native Boulders	Ton	340
24	Large Native Boulders	Ton	360
25	Flat Native Stone	Ton	290
26	Native Stone (Shot Rock)	Ton	120
27	River Cobble	Ton	70
28	Sorted Creek Gravel	Ton	50
Deductive Alternative 2 - Erosion Control Materials			
29	BioD-Blocks 16"	E.A.	36
30	Coir wattles 6"	E.A.	18
31	Coir Wattles 9"	E.A.	5
32	Coir Wattles 12"	E.A.	10
33	Compost	C.Y.	25
34	Coir Fabric 13.1 ft x 83 ft	S.Y.	480
35	Coir Fabric 6.56 x 166 ft	S.Y.	240
36	Filter Fabric	S.Y.	500
37	Straw Bales	E.A.	120
38	18" Wedge Stakes	E.A.	2240
39	22" Wedge Stakes	E.A.	360
40	Notch Stakes	E.A.	1700

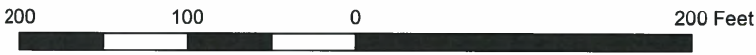


Project: Tanglewood Branch Stream Enhancement		
Sheet No.	County:	Designed By:
2	Washington	MVE
Drawn By:	Date:	
JJH	09/20/2021	

Planview Overview



- Sheet 4 Upstream Detail Extent of View
- Sheet 5 Downstream Detail Extent of View
- Sheet 13 Tanglewood Tributary Upstream Extent of View
- Sheet 18 Tanglewood Trib Downstream Extent of View
- Sheet 23 BioRetention Extent of View
- Design Channel Centerline
- Design Channel Alignment
- Floodplain Excavation
- Other CAC Design Lines



Project: Tanglewood Branch Stream Enhancement		
Sheet No.	County:	Designed By:
3	Washington	MVE
Drawn By:	Date:	
JJH	03/05/2021	

Planview Upstream Detail



Boulder Riffle Cluster
Invert Elevation - 1265.5'

XS STA 3+50
See Sheet 06

Remove Concrete from
Channel Along Reach and Bank Slope

Stacked Rock Wall
30 ft length
See Sheet 06

Gregg Ave.

Level and Grade
Floodplain

Grand Pool
Waterfall #1

Cut and Slope Overhanging Bank

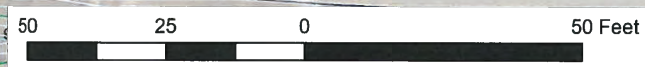
Boulder Riffle Cluster
Invert Elevation - 1271.4'
See Sheet 06 & 12

Remove Rip-Rap
Stacked Rock Wall LB
See Sheet 06

XS STA 4+67
See Sheet 07

XS STA 3+01
See Sheet 06

- Cross Sections
- - - Water & Sewer
- Other CAC Design Lines
- ~ Design Channel Centerline
- Design Channel Alignment
- ▨ Floodplain Excavation
- Topo - Major
- Topo - Minor

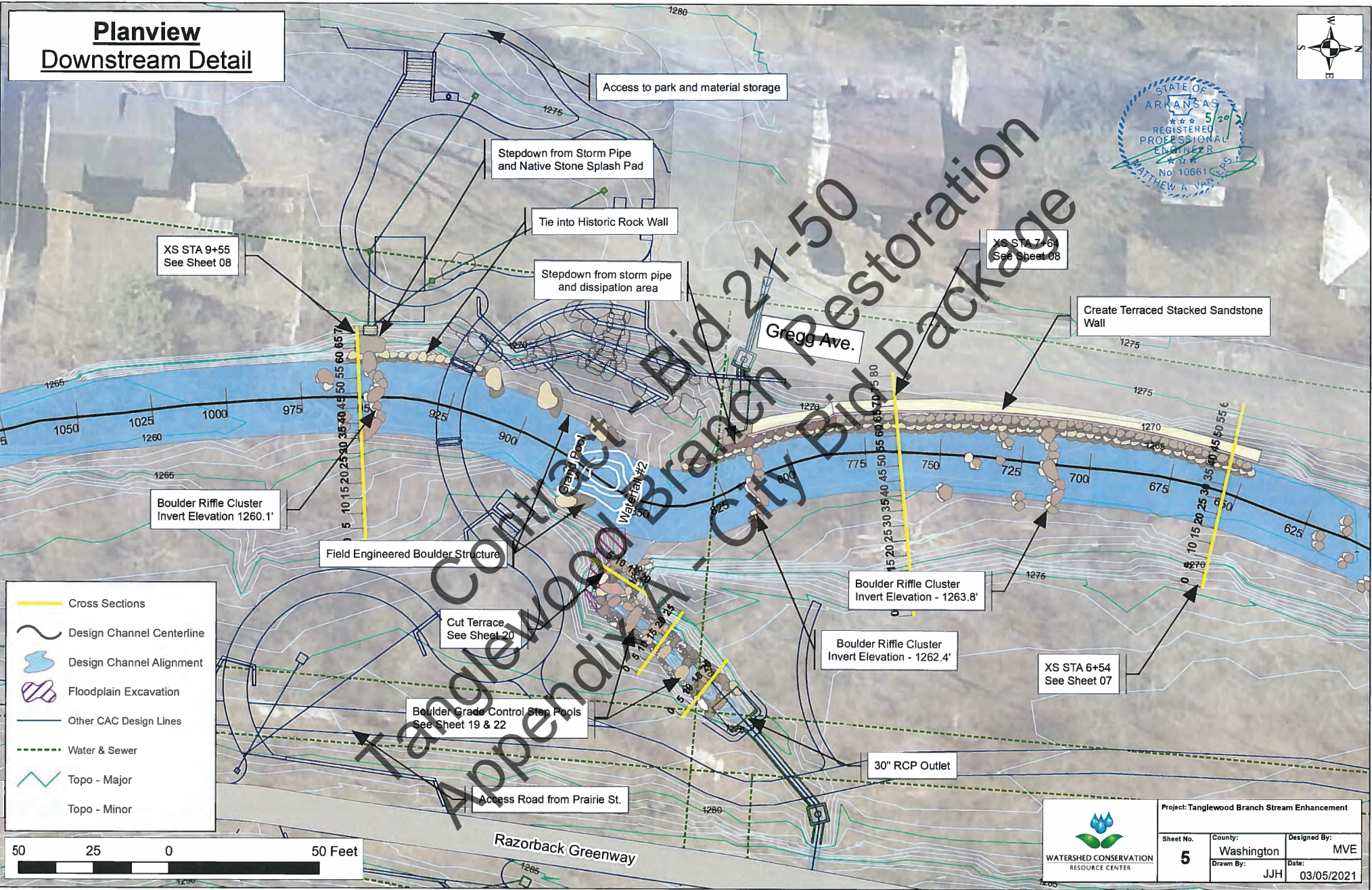


Razorback Greenway

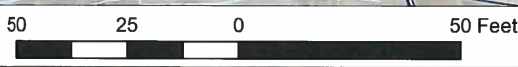
Project: Tanglewood Branch Stream Enhancement

Sheet No.	County:	Designed By:
4	Washington	MVE
Drawn By:	Date:	
JJH	03/05/2021	

Planview Downstream Detail



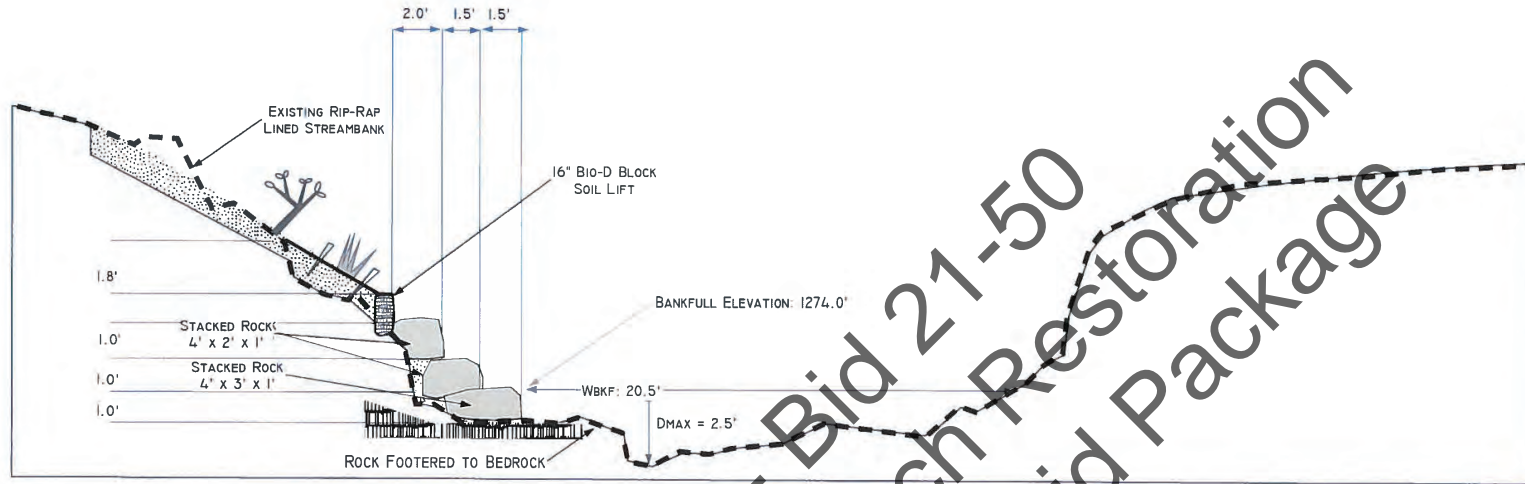
- Cross Sections
- Design Channel Centerline
- Design Channel Alignment
- Floodplain Excavation
- Other CAC Design Lines
- Water & Sewer
- Topo - Major
- Topo - Minor



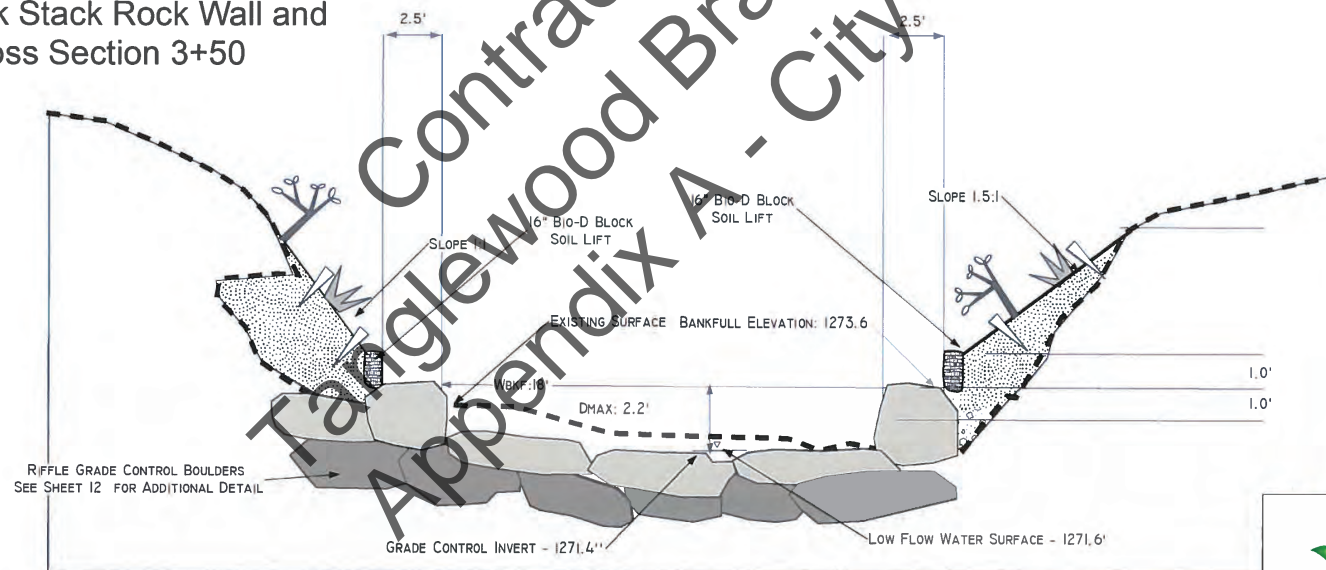
Project: Tanglewood Branch Stream Enhancement		
Sheet No.	County:	Designed By:
5	Washington	MVE
Drawn By:	Date:	
JJH	03/05/2021	


Typical Cross Section Details

Typical Left Bank Stack Rock Wall Cross Section 3+01



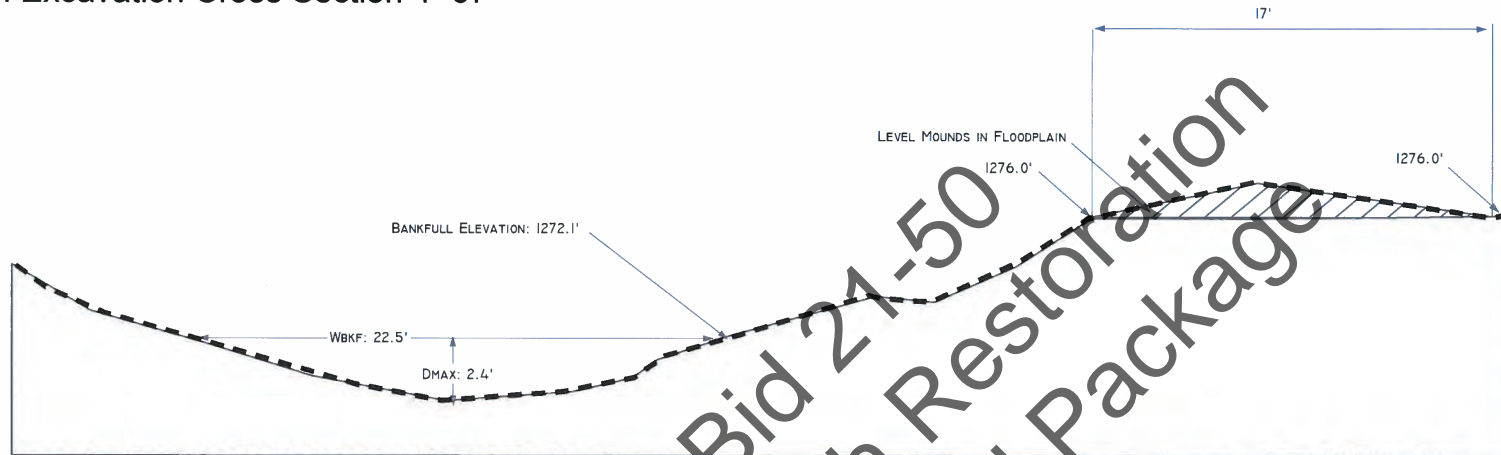
Typical Right Bank Stack Rock Wall and Grade Control Cross Section 3+50



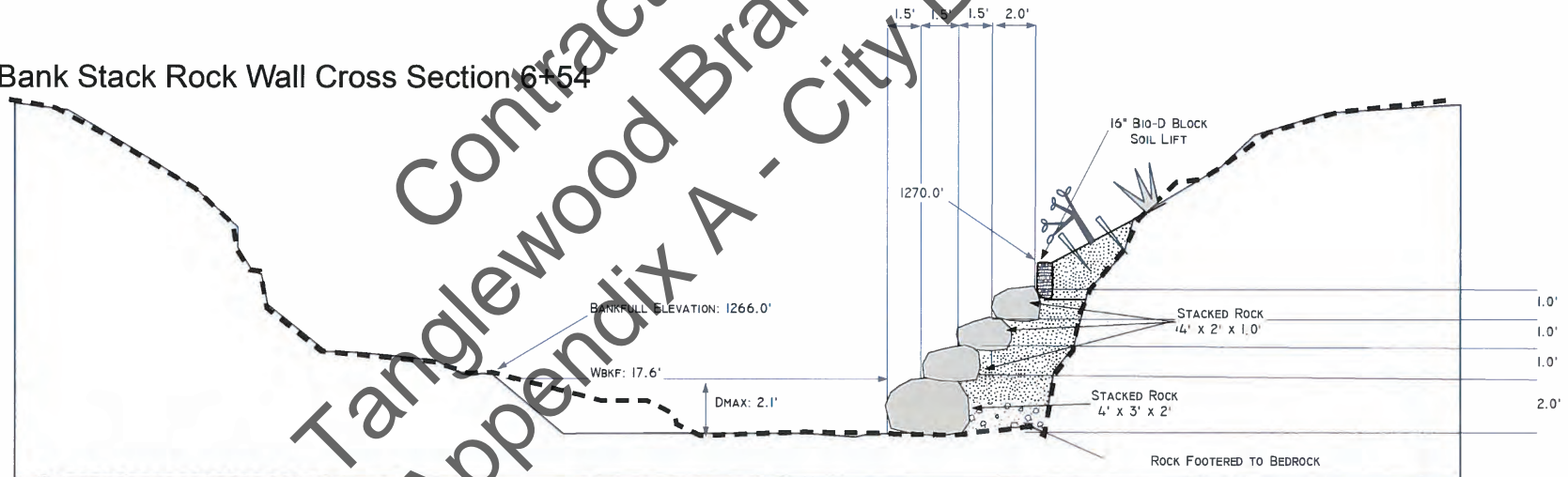
 Project: Tanglewood Branch Stream Enhancement		
Sheet No.	County:	Designed By:
6	Washington	MVE
Drawn By:	Date:	
JJH	03/05/2021	

Typical Cross Section Details

Typical Floodplain Excavation Cross Section 4+67



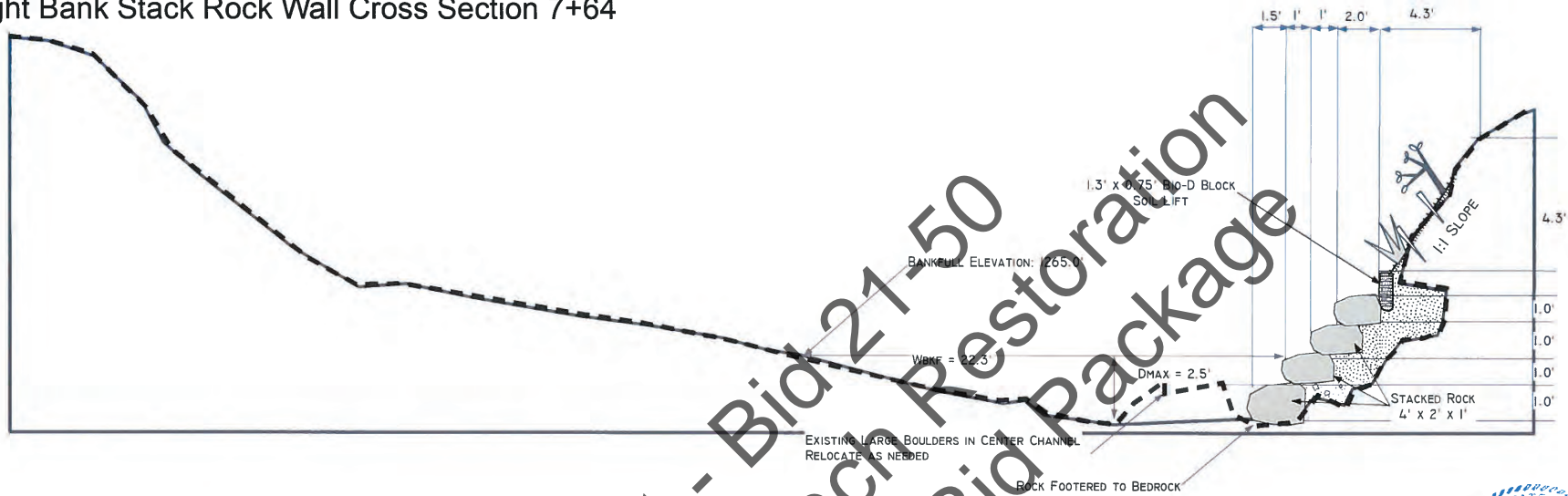
Typical Right Bank Stack Rock Wall Cross Section 6+54



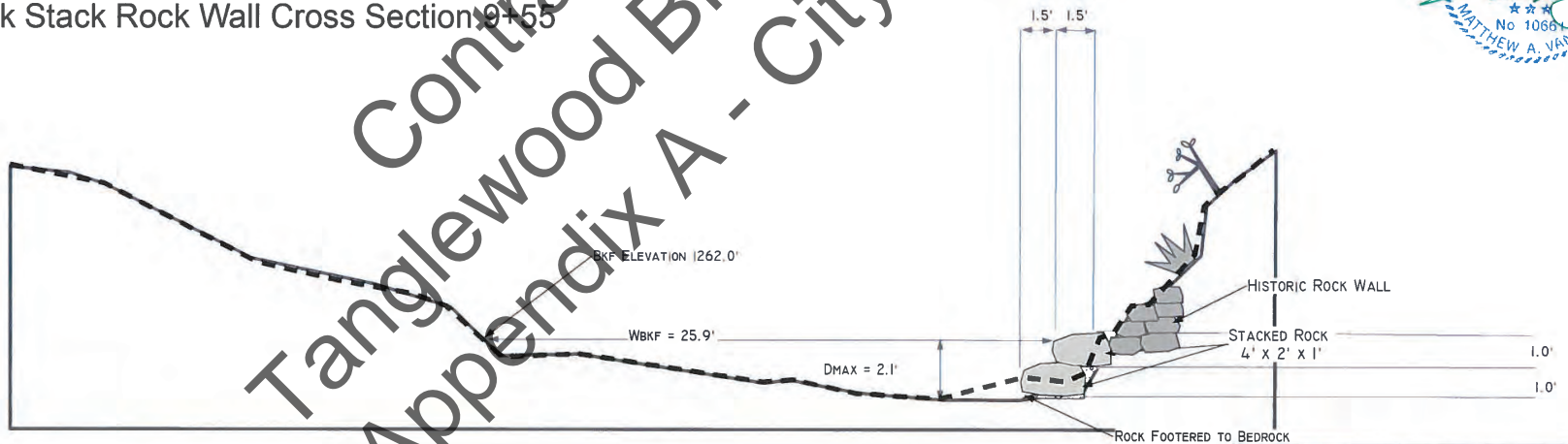
		Project: Tanglewood Branch Stream Enhancement	
Sheet No.	County:	Designed By:	MVE
7	Washington	Drawn By:	JJH
		Date:	03/05/2021


Typical Cross Section Details

Typical Right Bank Stack Rock Wall Cross Section 7+64



Typical Right Bank Stack Rock Wall Cross Section 9+55



			Project: Tanglewood Branch Stream Enhancement	
Sheet No.	County:	Designed By:		
8	Washington	MVE		
Drawn By:	JJH	Date:		
		03/05/2021		

Longitudinal Profile
Tanglewood Branch
STA 0+00 to 4+00

Construct step access to stream

Remove Rip Rap
 Stack Rock Wall LB

Replace Concrete
 Stack Rock Wall Rb

Grade Control Invert - 1271.4'

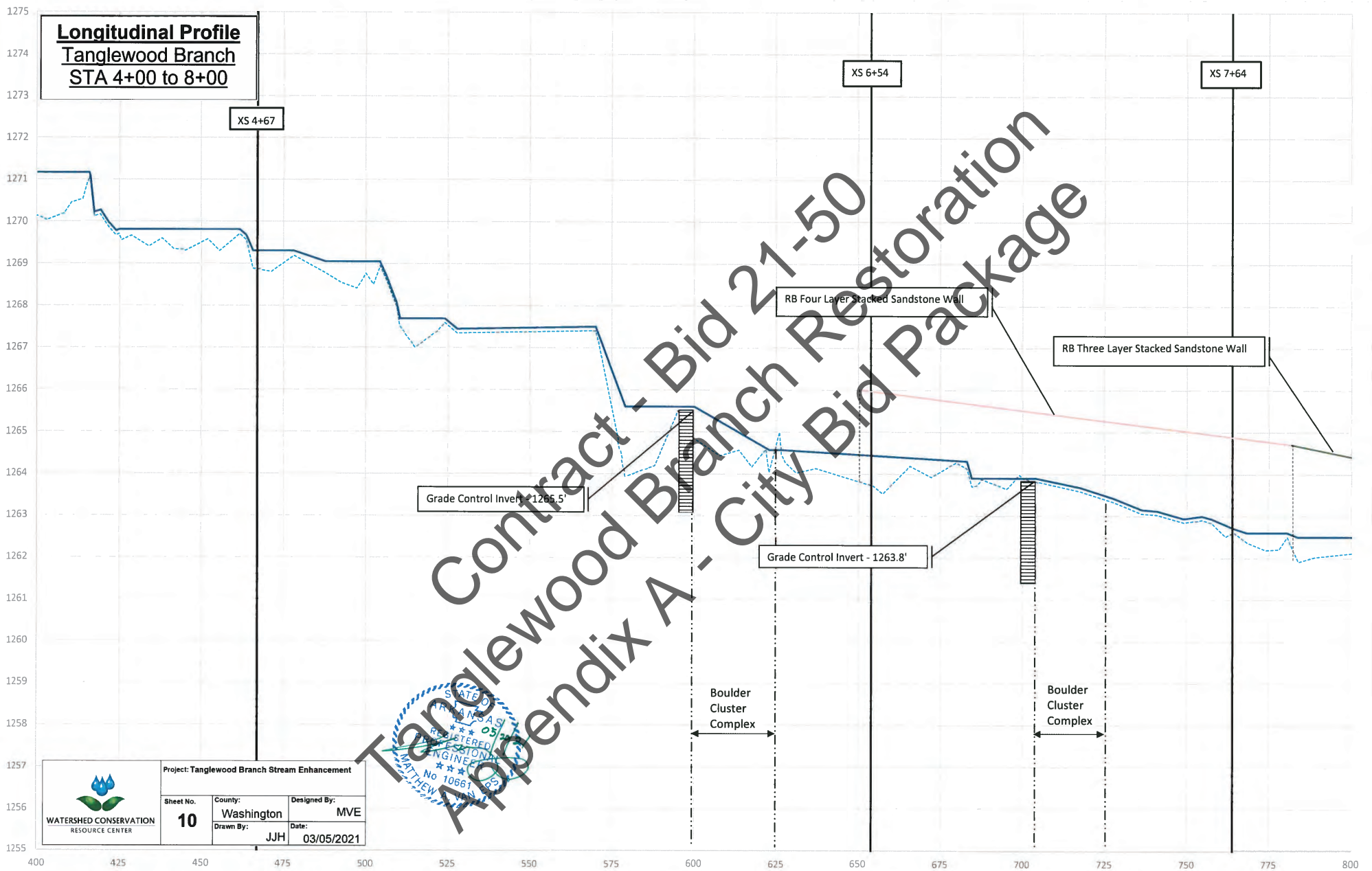
Boulder
 Cluster
 Complex

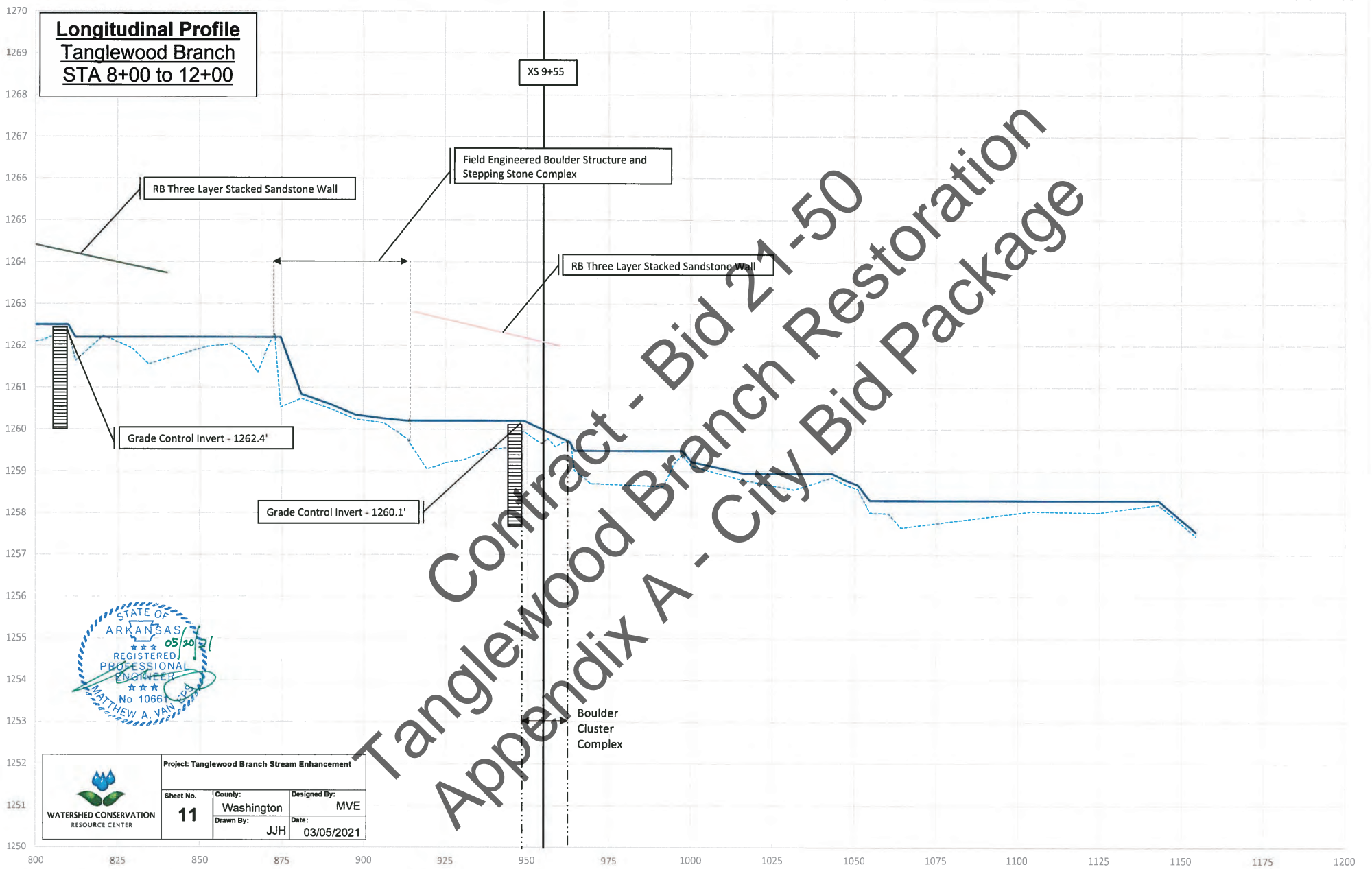


Project: Tanglewood Branch Stream Enhancement		
Sheet No.	County:	Designed By:
9	Washington	MVE
Drawn By:	Date:	
JJH	03/05/2021	



Contract - Bid 21-50
 Tanglewood Branch Restoration
 Appendix A - City Bid Package

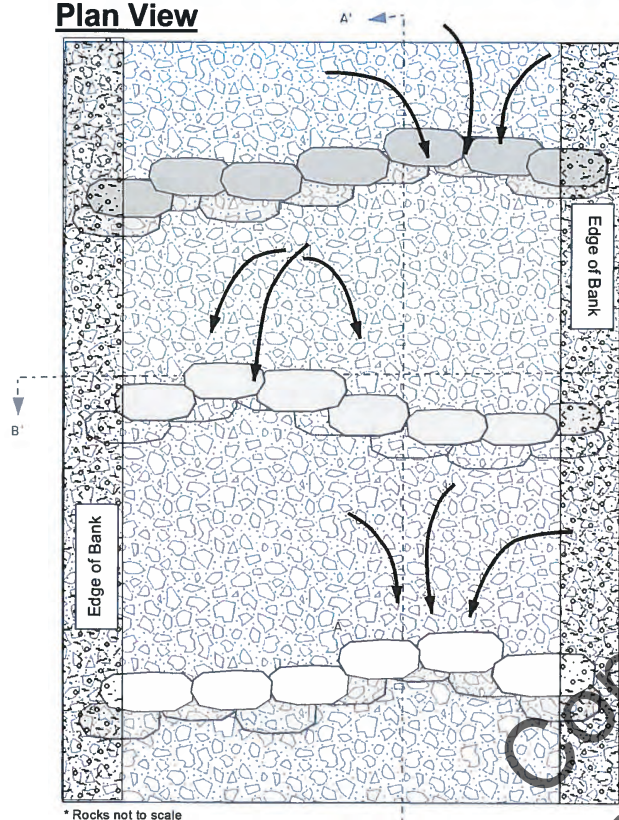




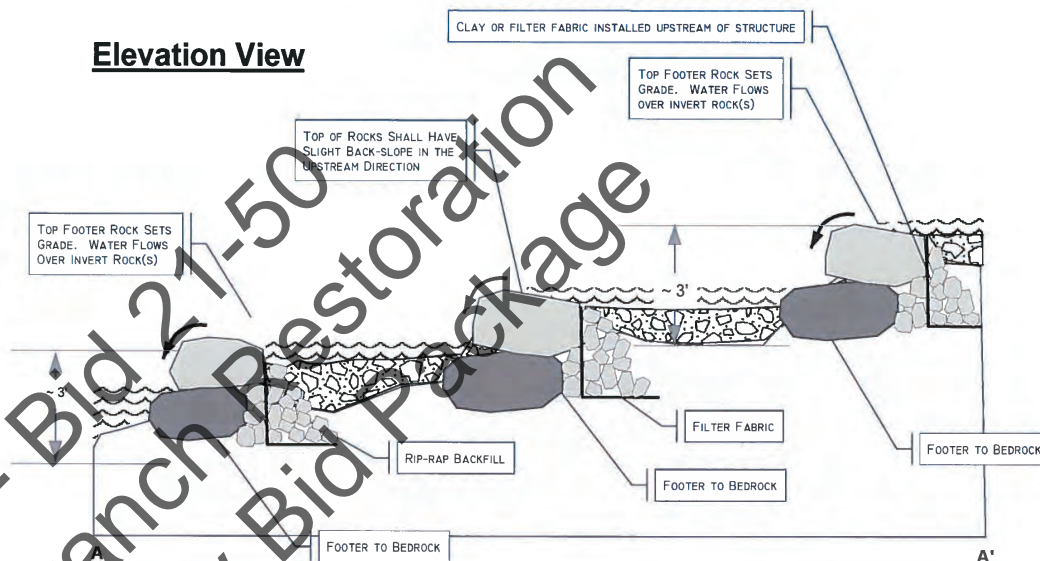
Typical Grade Control Construction Details (Tanglewood Branch)

SCALE: NTS

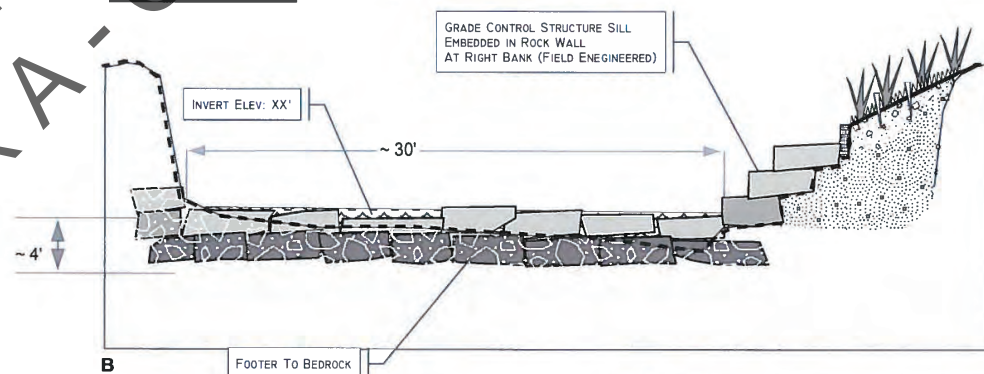
Plan View



Elevation View



Section View



NOTES: Boulders will be 1 ton minimum to 3 ton maximum weight

The Grade Control Structure will be field engineered to meet the general design specifications presented in the plan set

Water surface grade will be controlled by the invert elevation. The final invert elevation will be dependent on field conditions and will be specified by the Engineer during construction

All structures shall be footered to bedrock unless specified by the Engineer in the field

All boulders will be installed with a slight backslope in the upstream direction


All boulders shall have direct contact to the adjacent boulder so that no gap between adjacent boulders is present

Filter fabric and/or clay will be installed on the upstream side of the grade control structure

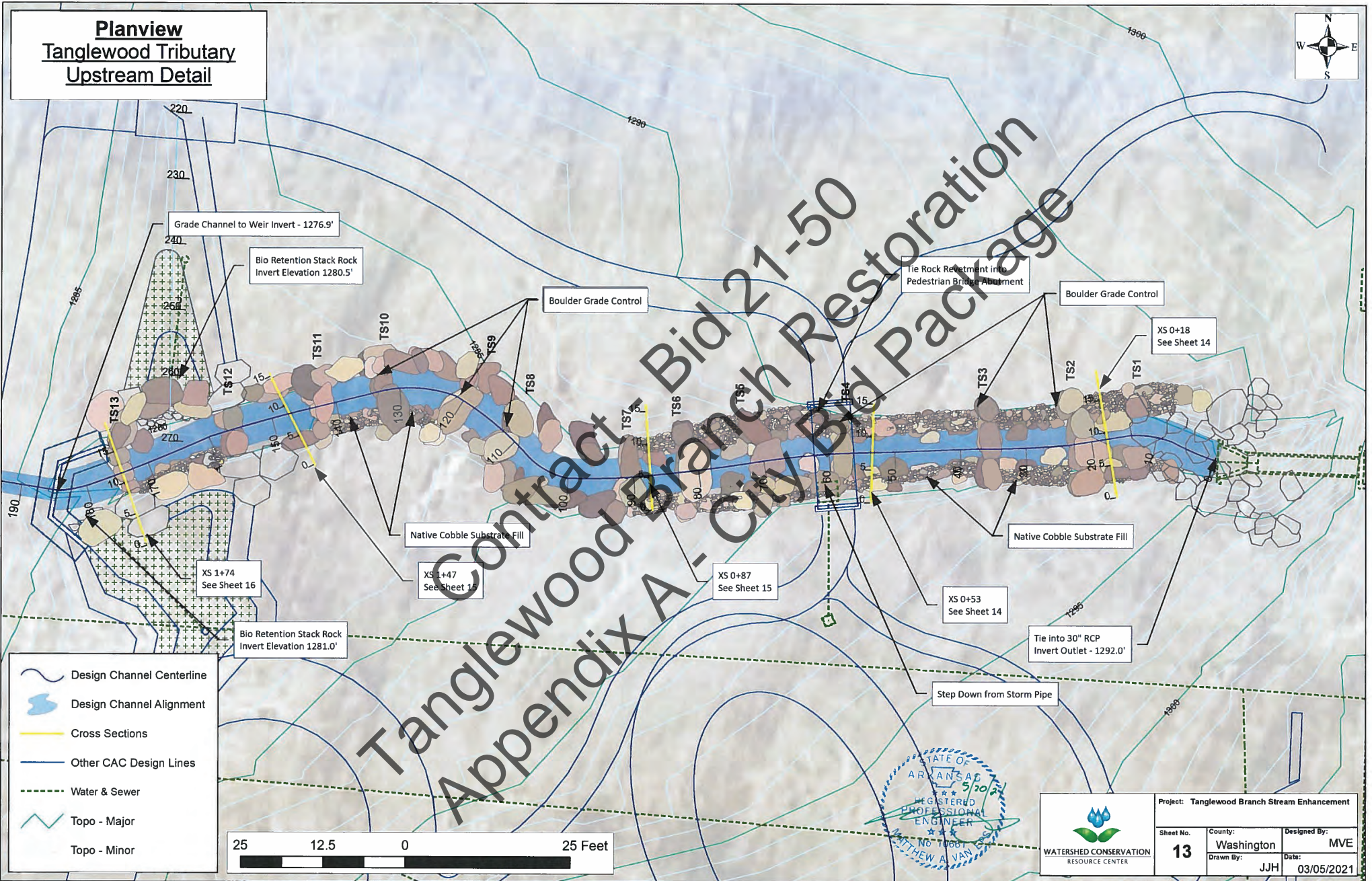
Rip-rap shall be placed in front of structure boulders to prevent scour and undermining of boulders

If shale bedrock is present, the contractor shall excavate trench for footer rocks



			Project: Tanglewood Branch Stream Enhancement		
Sheet No.	County:	Designed By:	Sheet No.	County:	Designed By:
12	Washington	MVE	Sheet No.	County:	Designed By:
Drawn By:	JJH	Date:	Drawn By:	JJH	Date:
		03/05/2021			

Planview
Tanglewood Tributary
Upstream Detail



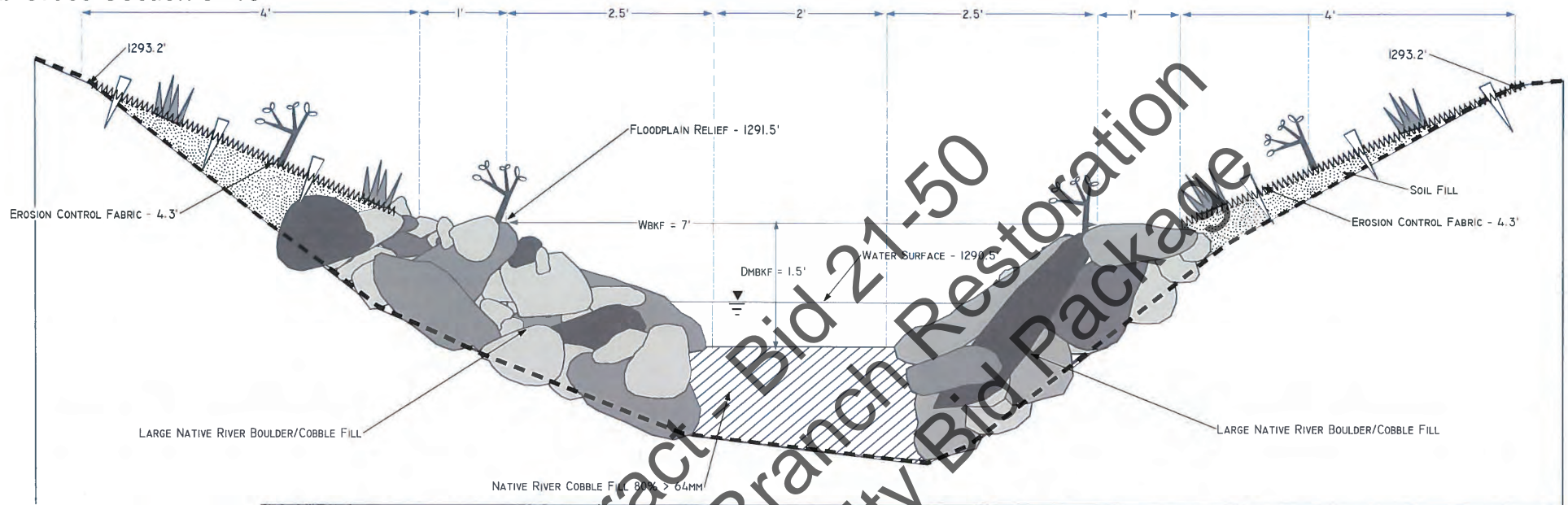
Contract Bid 21-50
 Tanglewood Branch Restoration
 Appendix A - City Bid Package



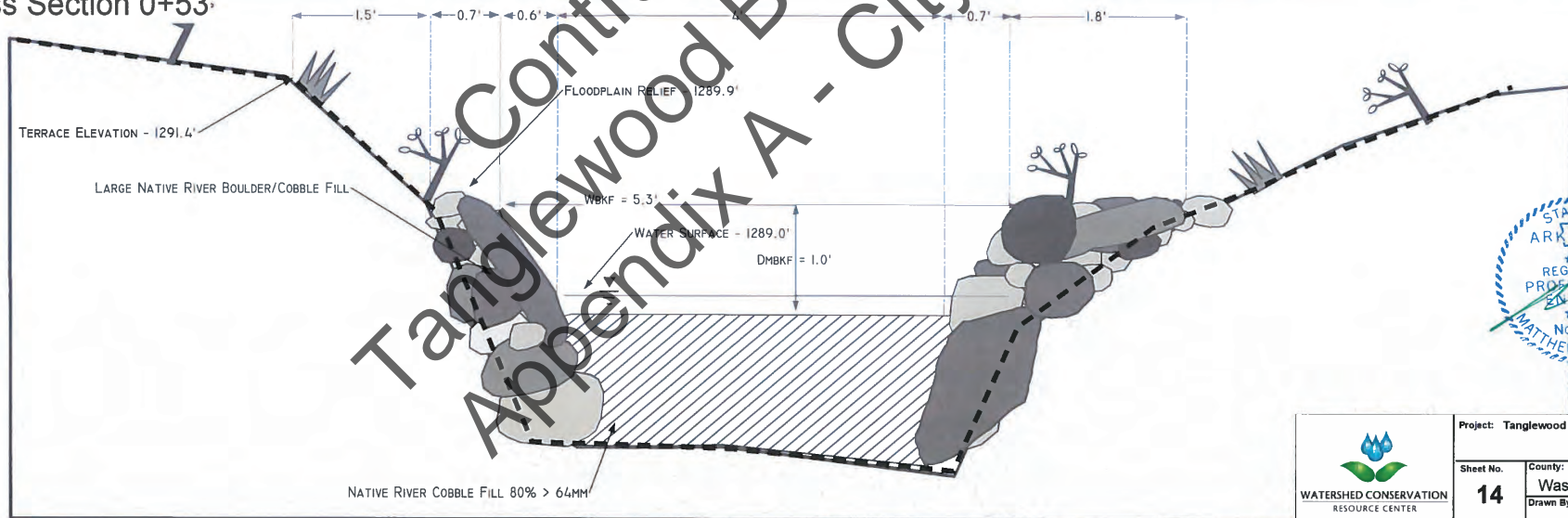
Project: Tanglewood Branch Stream Enhancement		
Sheet No.	County:	Designed By:
13	Washington	MVE
Drawn By:	Date:	
JJH	03/05/2021	


Typical Cross Section Details

Trib Cross Section 0+18



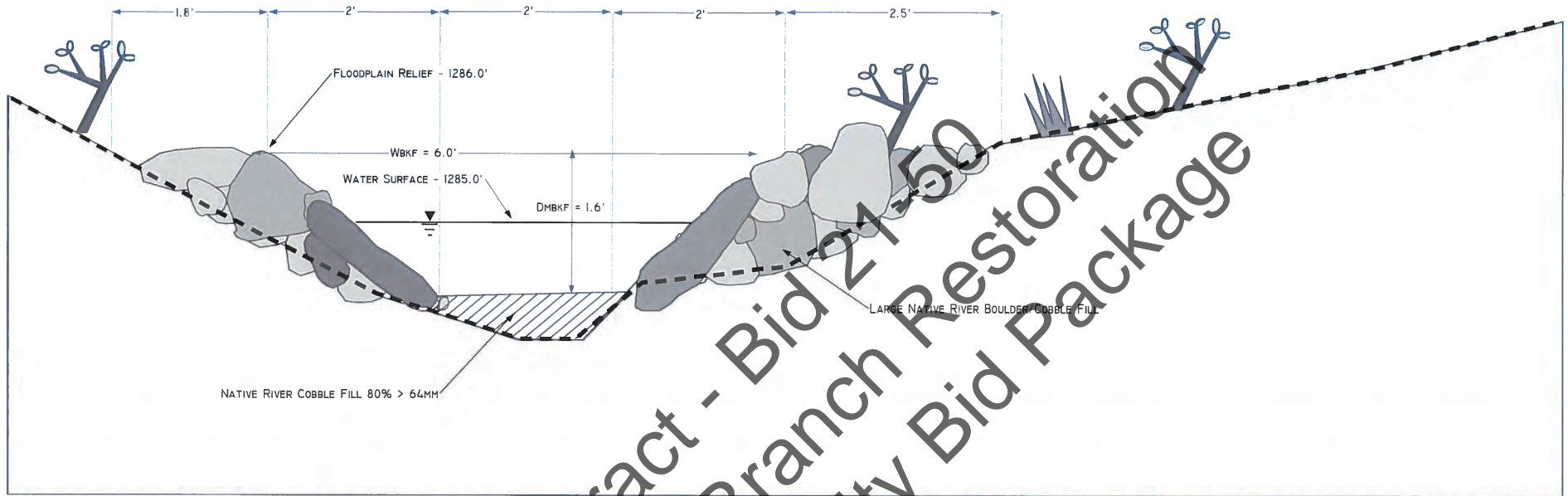
Trib Cross Section 0+53



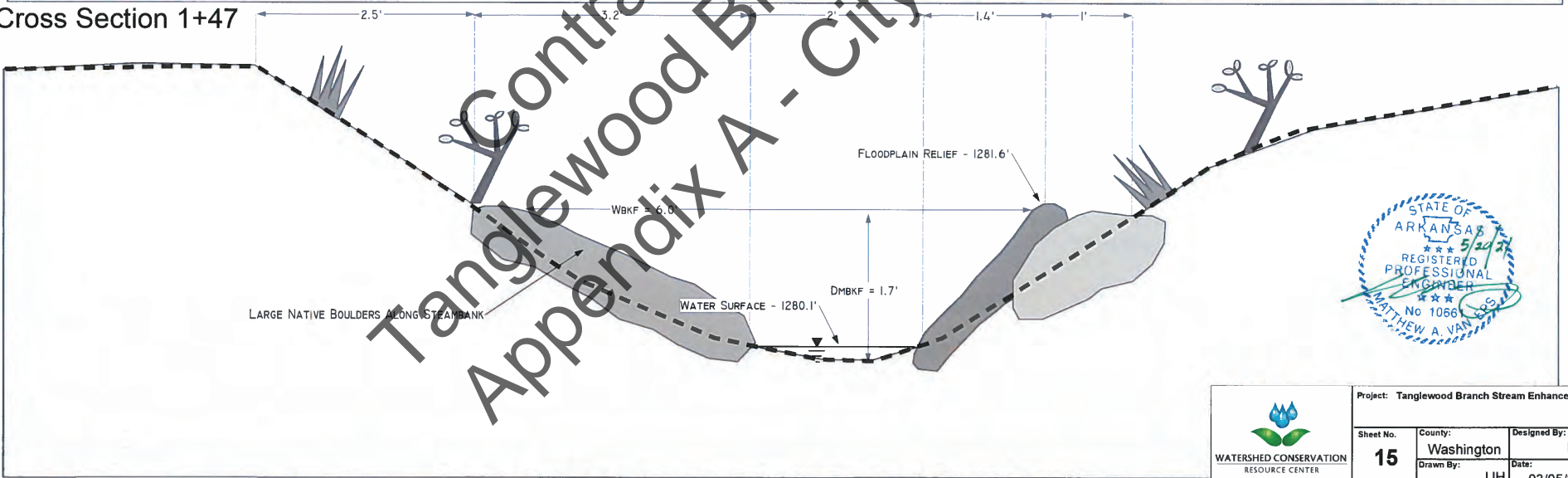
		Project: Tanglewood Branch Stream Enhancement	
Sheet No.	County:	Designed By:	MVE
14	Washington	Drawn By:	JJH
		Date:	03/05/2021


Typical Cross Section Details

Trib Cross Section 0+87



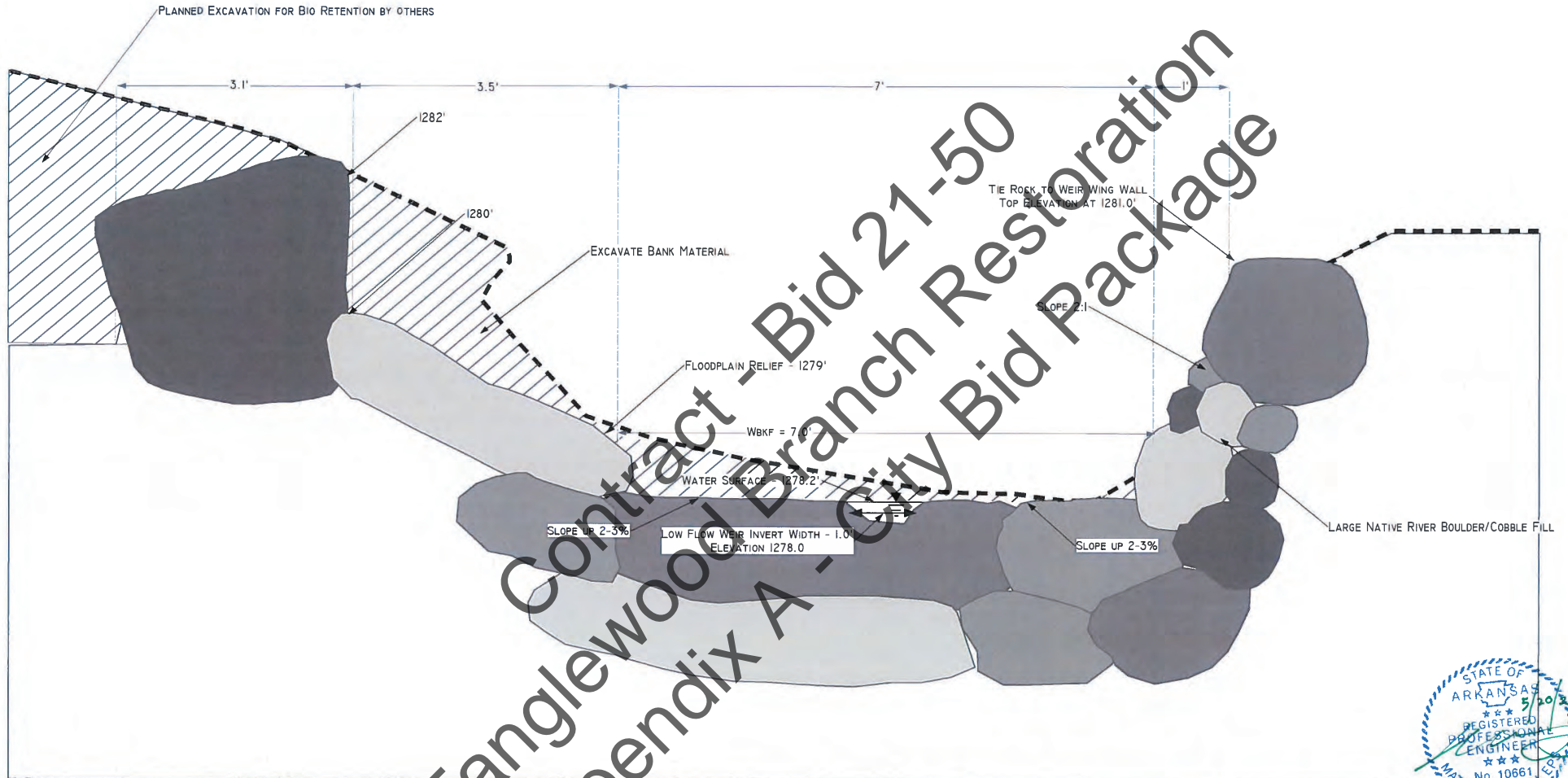
Trib Cross Section 1+47




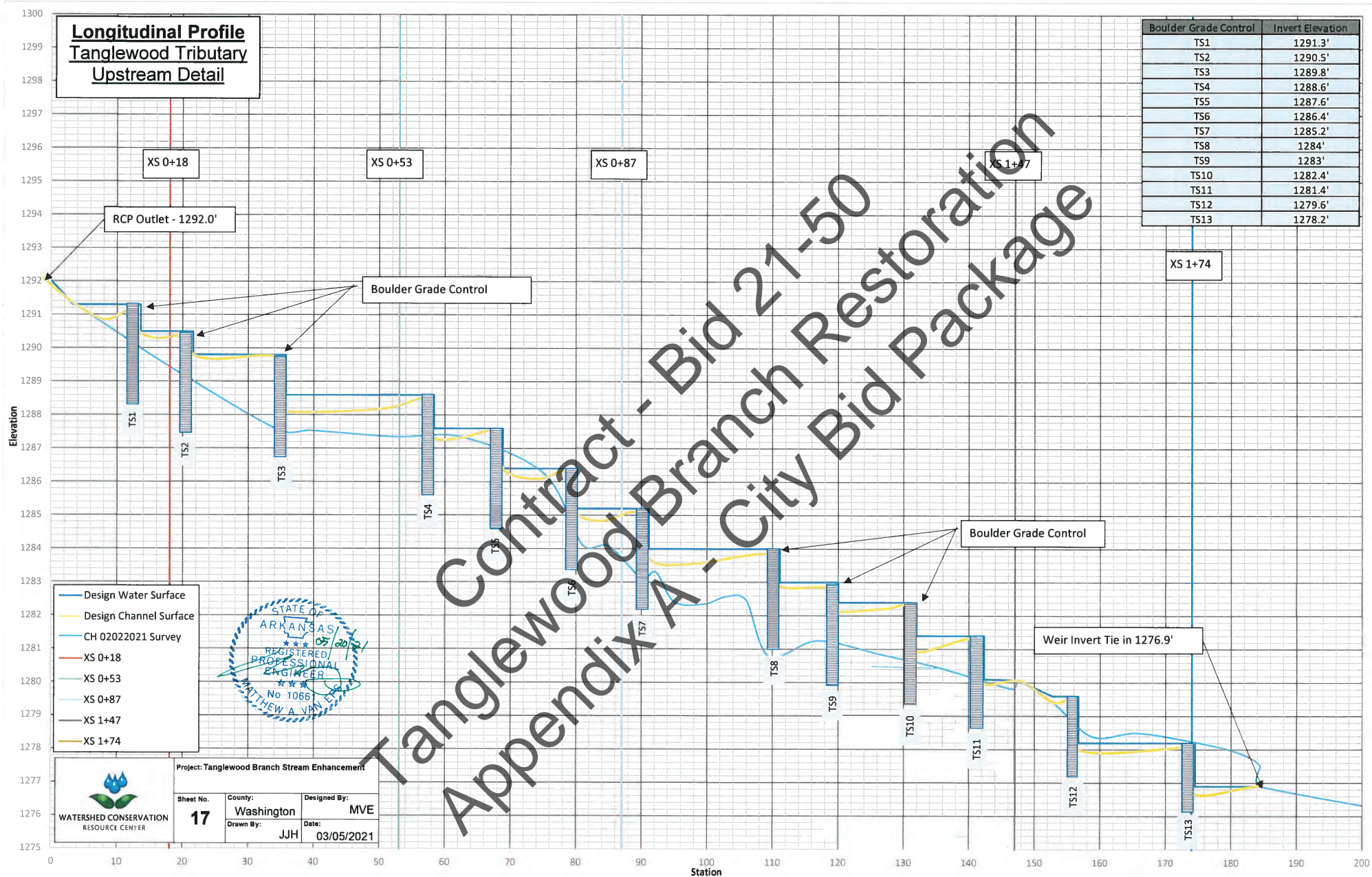
		Project: Tanglewood Branch Stream Enhancement	
Sheet No.	County:	Designed By:	MVE
15	Washington	Drawn By:	JJH
		Date:	03/05/2021

Typical Cross Section Details

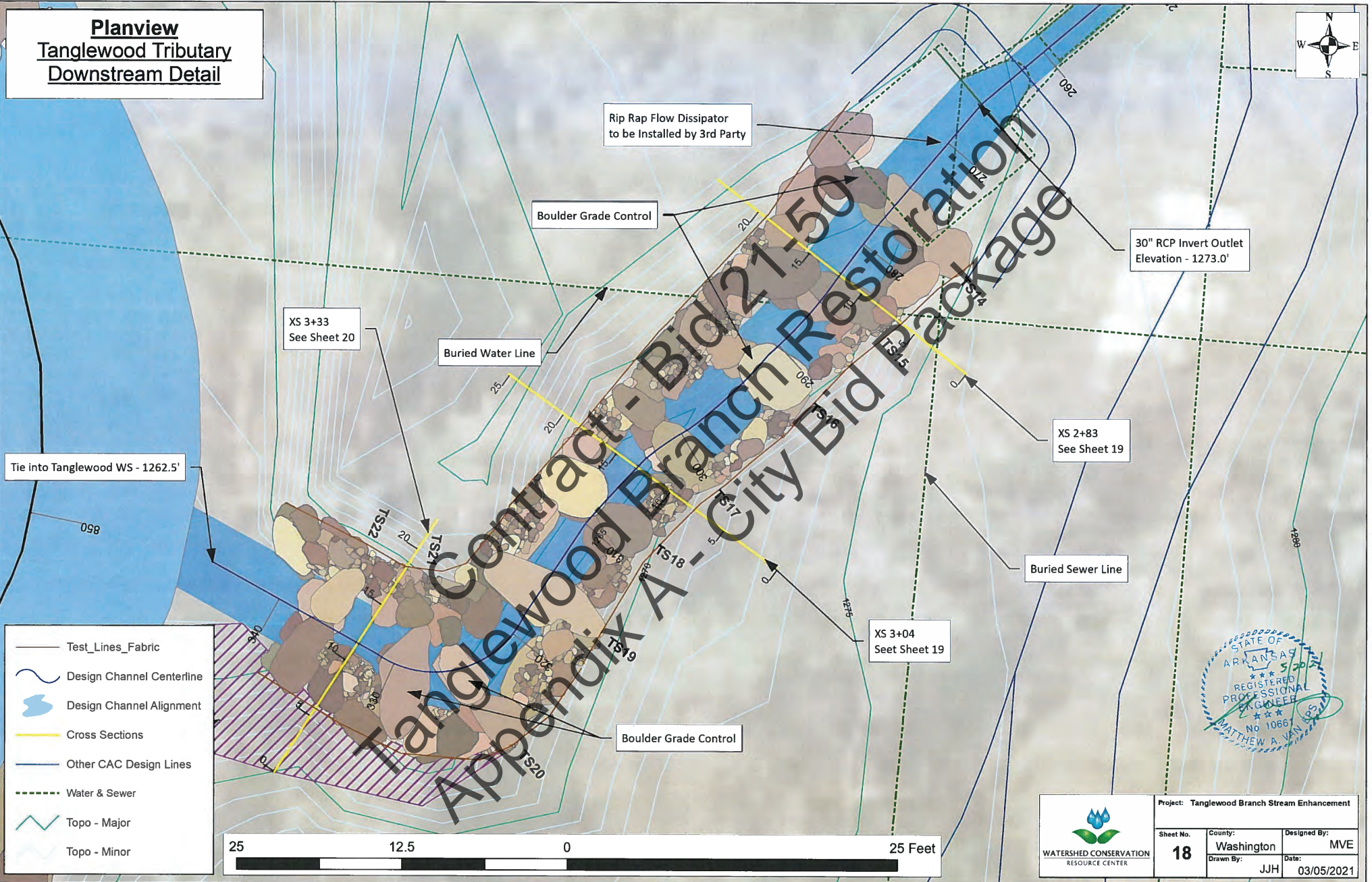
Trib Cross Section 1+74



		Project: Tanglewood Branch Stream Enhancement	
Sheet No.	County:	Designed By:	MVE
16	Washington	Drawn By:	JJH
		Date:	03/05/2021



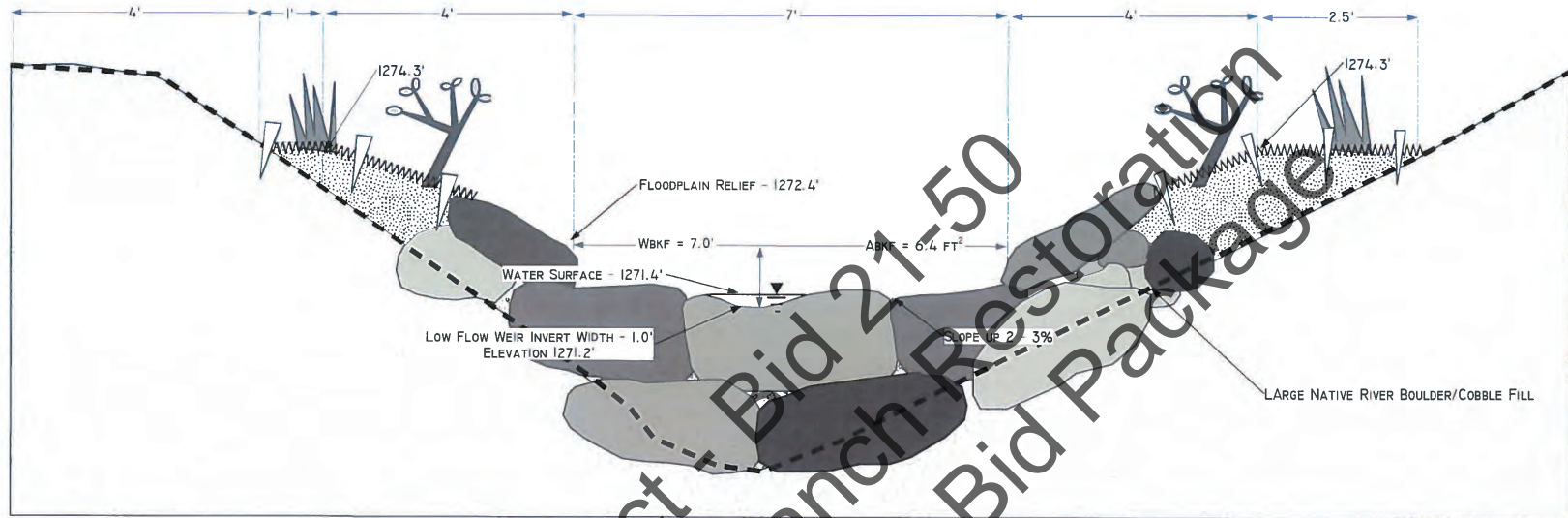
Planview
Tanglewood Tributary
Downstream Detail



Project: Tanglewood Branch Stream Enhancement		
Sheet No.	County:	Designed By:
18	Washington	MVE
Drawn By:	Date:	
JJH	03/05/2021	

Typical Cross Section Details

Trib Cross Section 2+83



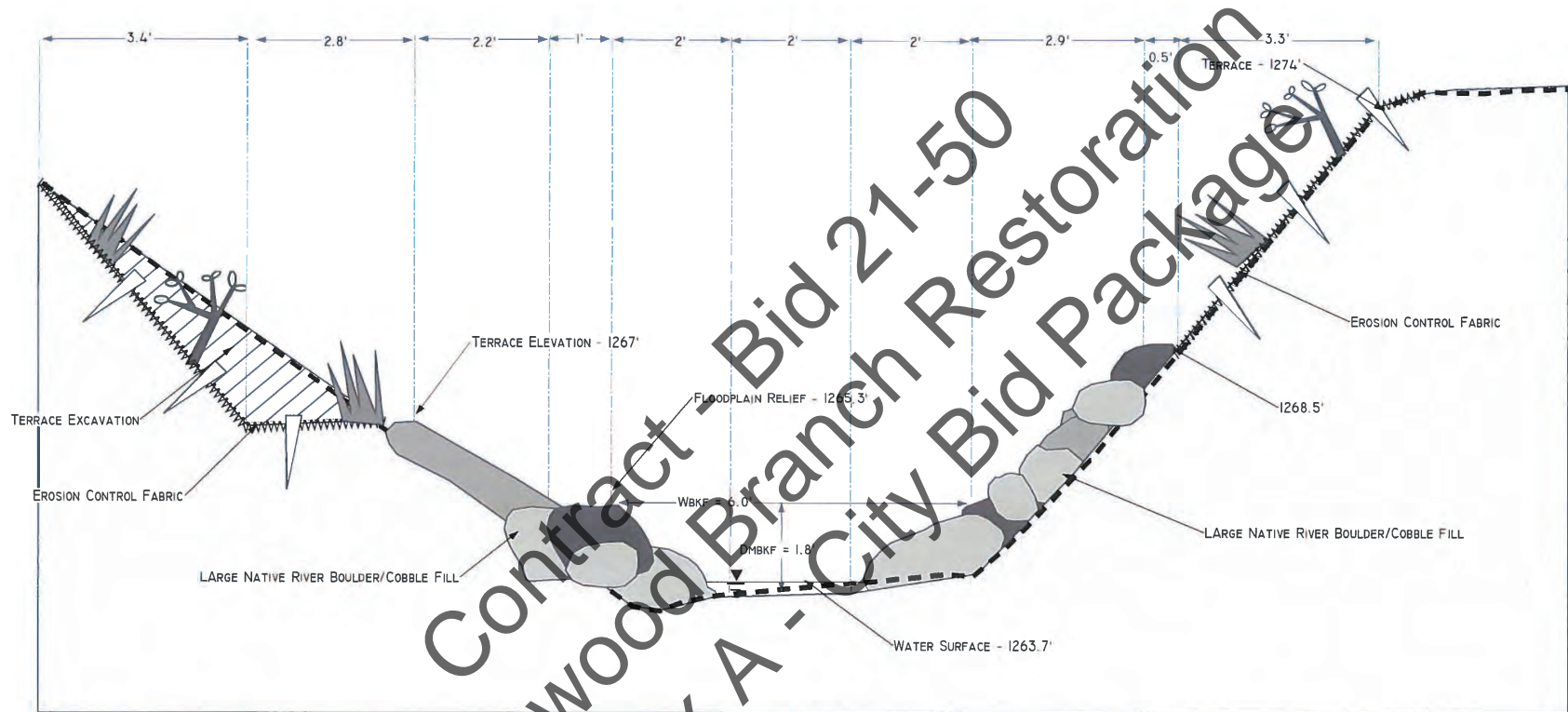
Trib Cross Section 3+04




Project: Tanglewood Branch Stream Enhancement		
Sheet No.	County:	Designed By:
19	Washington	MVE
Drawn By:	Date:	
JJH	03/05/2021	

Typical Cross Section Details

Trib Cross Section 3+33



		Project: Tanglewood Branch Stream Enhancement	
		Sheet No. 20	County: Washington Designed By: MVE Drawn By: JJH Date: 03/05/2021

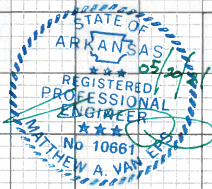
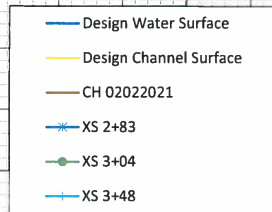
Longitudinal Profile
Tanglewood Tributary
Downstream Detail

Boulder Grade Control	Invert Elevation
TS14	1272.5'
TS15	1271.4'
TS16	1270.3'
TS17	1269.2'
TS18	1268.1'
TS19	1267'
TS20	1265.9'
TS21	1264.8'
TS22	1263.7'

30" RCP Outlet - 1273'

Boulder Grade Control

Tanglewood Water
 Surface Tie-in - 1262.5'



Project: Tanglewood Branch Stream Enhancement

Sheet No.	County:	Designed By:
21	Washington	MVE
Drawn By:	Date:	
JJH	03/05/2021	

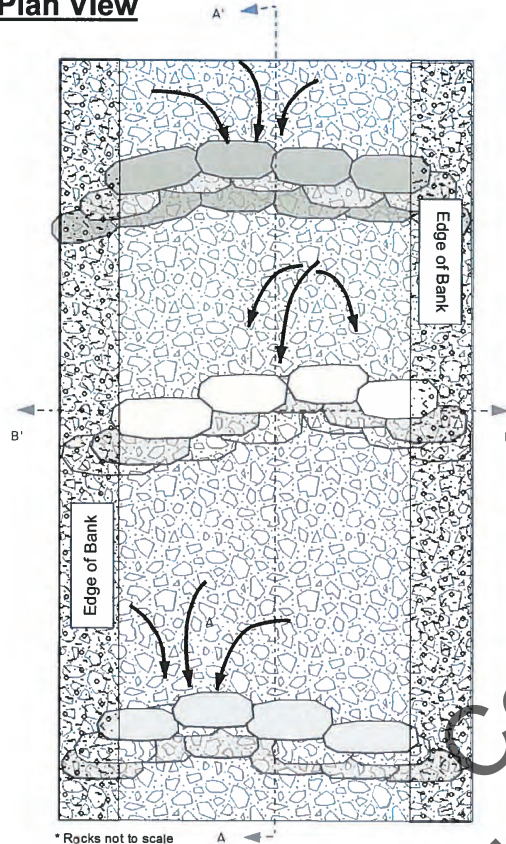


Contract -- Bid 21-50
 Tanglewood Branch Restoration
 Appendix A - City Bid Package

Typical Grade Control Construction Details (Tanglewood Branch Tributary)

SCALE: NTS

Plan View



NOTES: Boulders will be 1 ton minimum to 3 ton maximum weight

The Grade Control Structure will be field engineered to meet the general design specifications presented in the plan set

Water surface grade will be controlled by the invert elevation. The final invert elevation will be dependent on field conditions and will be specified by the Engineer during construction

All structures shall be footered to bedrock unless specified by the Engineer in the field

All boulders will be installed with a slight backslope in the upstream direction

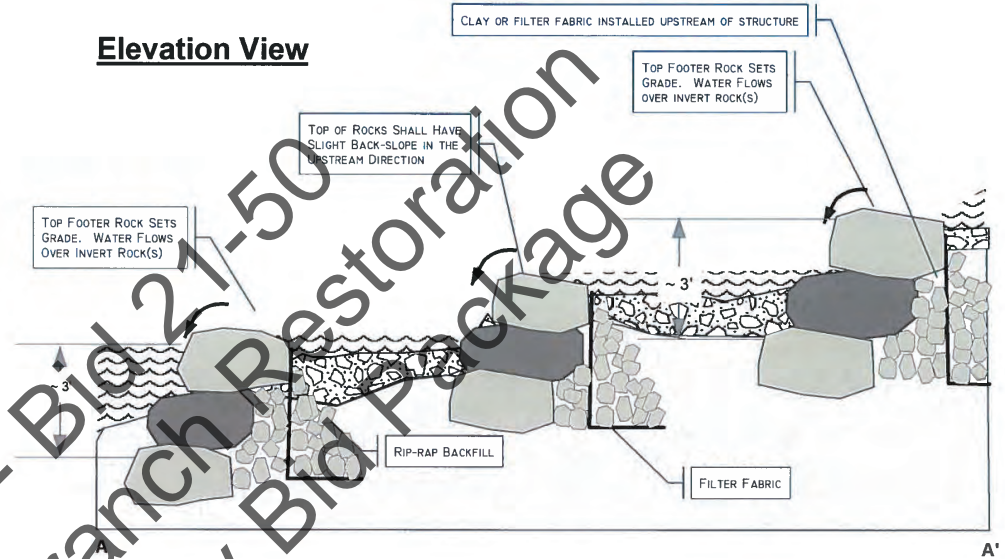
All boulders shall have direct contact to the adjacent boulder so that no gap between adjacent boulders is present.

Filter fabric and/ or clay will be installed on the upstream side of the grade control structure

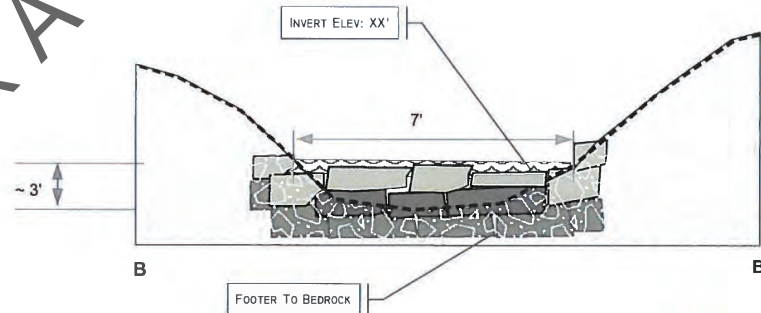
Rip-rap shall be placed in front of structure boulders to prevent scour and undermining of boulders


If shale bedrock is present, the contractor shall excavate a trench for footer rocks

Elevation View

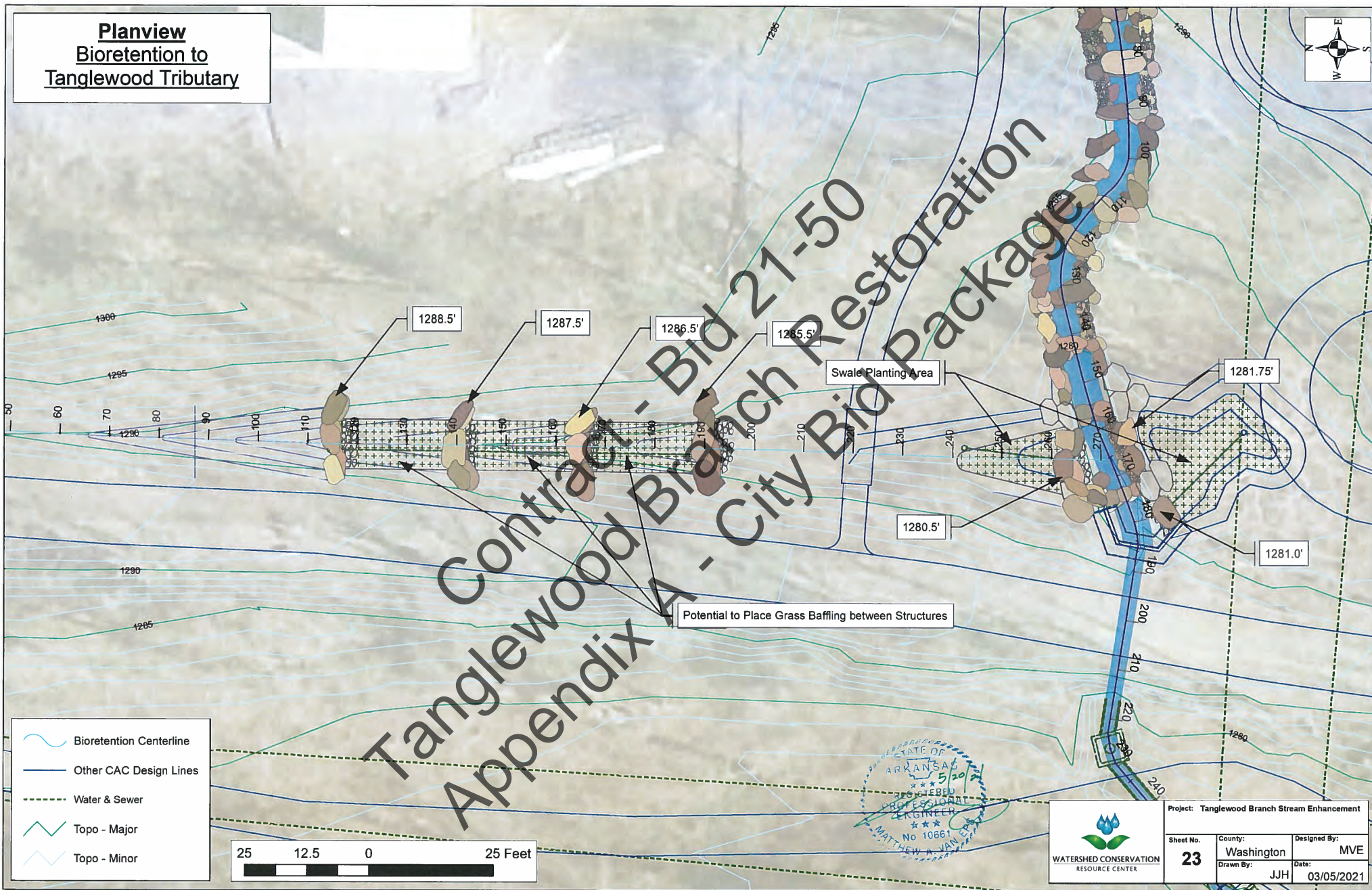


Section View

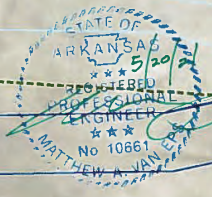
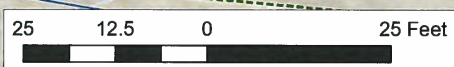


		Project: Tanglewood Branch Stream Enhancement	
Sheet No.	22	County: Washington	Designed By: MVE
Drawn By: JJH		Date: 03/05/2021	

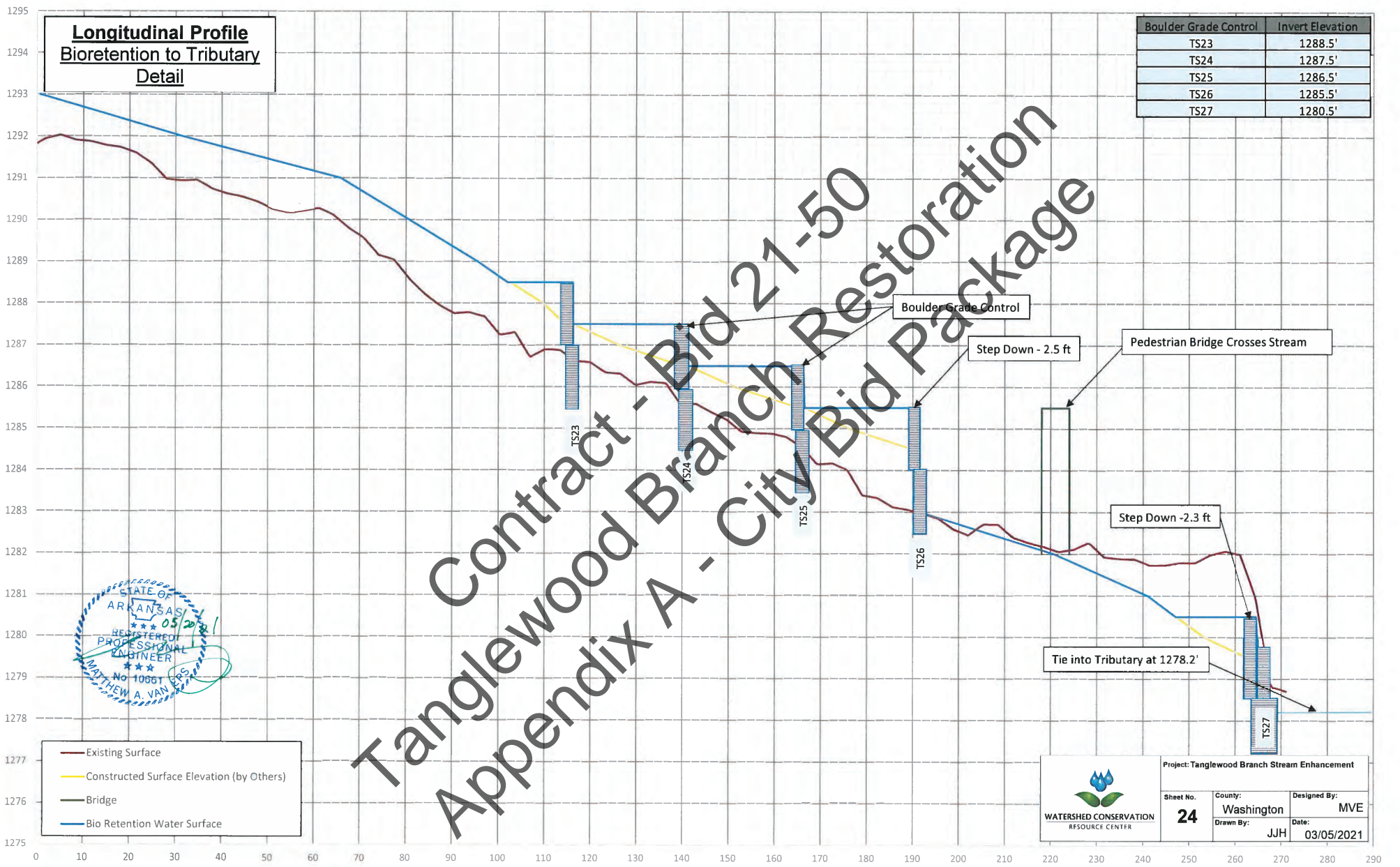
Planview
Bioretention to
Tanglewood Tributary



- Bioretention Centerline
- Other CAC Design Lines
- Water & Sewer
- Topo - Major
- Topo - Minor



Project: Tanglewood Branch Stream Enhancement		
Sheet No.	County:	Designed By:
23	Washington	MVE
Drawn By:	Date:	
JJH	03/05/2021	




Longitudinal Profile
Bioretention to Tributary
Detail

Boulder Grade Control	Invert Elevation
TS23	1288.5'
TS24	1287.5'
TS25	1286.5'
TS26	1285.5'
TS27	1280.5'



- Existing Surface
- Constructed Surface Elevation (by Others)
- Bridge
- Bio Retention Water Surface

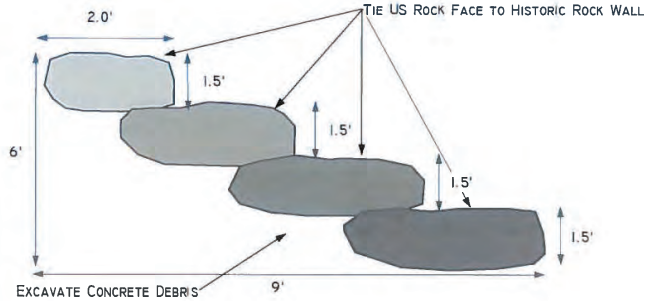


Project: Tanglewood Branch Stream Enhancement

Sheet No.	County:	Designed By:
24	Washington	MVE
Drawn By:	Date:	
JJH	03/05/2021	

Additional Details

Typical Access to Tanglewood STA 0+79



Typical BioD-Block Assembly

FIGURE 1

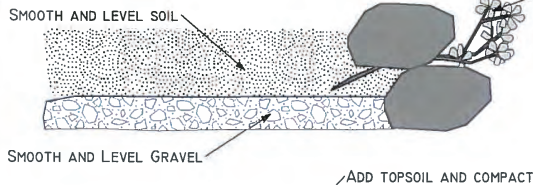


FIGURE 2

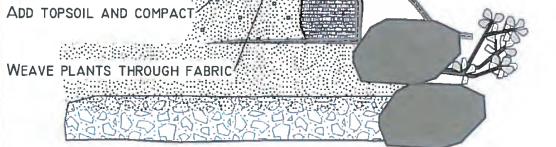
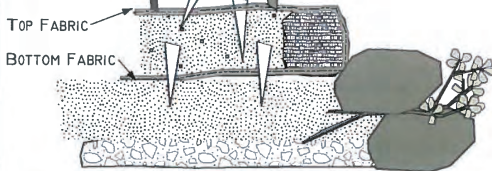


FIGURE 3



Typical BioD-Block Assembly Continued

Contractor's Responsibility

The contractor will be responsible for completing a portion of the BioD-Block installation process, while coordinating with a 3rd party who will place and secure blocks for filling. The illustrations shown present the general installation details for installing BioD-Blocks. The work to be performed by the contractor for the "Installation of Soil Mattress" bid item is as follows:

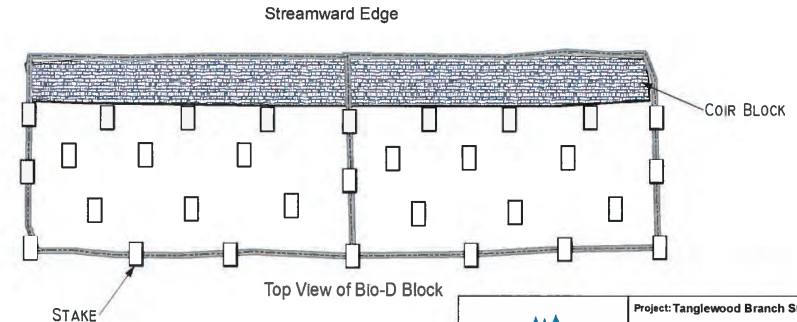
1. The engineer will stake out and align the blocks
2. A third party will be onsite at the time of BioD-Block installation and will place and secure the BioD-Blocks and pre-plant them in preparation for filling.
3. The contractor will fill each block with a mixture of top soil and compost to a height of 0.2' above the finish grade, to allow for compaction and subsidence. Top soil and compost shall be well mixed within the filled layer.
4. During the fill process, BioD-Blocks shall remain vertically oriented and will need to be reset if they are disturbed.
5. Soil near the streamward edge of the block will need to be compacted manually using a hand tamper or similar tool. Slopes will be manually raked and smoothed to their finish elevations. Large clumps of soil shall be discarded on the terrace.
6. Contractor will pull back top fabric and temporarily stake it down. Temporary staking requires at least 2 stakes per side seam and 4 stakes along the back edge of the fabric. Stakes shall be driven a minimum of 1' deep into the ground. 18" hardwood stakes will be used to secure the fabric to the ground.
7. While the third party is installing blocks in preparation for filling, the contractor will need to wait before being able to fill and grade the soil lift.
8. Volume of fill is included in the "Bank Shaping and Floodplain Grading" Bid item

Additional details of the entire BioD-Block installation process can be found are presented below.

BioD-Block Assembly Details

1. Soil mattress will be constructed using BioD-Blocks, a coir fiber block system that consists of a densely packed mattress coir fiber block attached to a bristle coir woven fabric. This layer provides a 2 to 3 year structure that will allow plants to root and mature.
2. Before installation, the rock bed bench should be cleaned and leveled with river gravel. Lay willow, sycamore, or other live plants/cutting between stack rock.
3. The engineer on site will align the backing stakes. BioD-Block should be laid out along the backing stakes beginning at the upstream end. Unroll the block fabric, save the coir ties, and spread the bottom fabric. Place additional blocks on the bench and unroll them. Join the BioD-Block by inserting the male end of the second block to female end of the first block.
4. Tie the BioD-Block fabric together by weaving the saved coir ties through the coir netting. At minimum, one tie shall be placed on the front face and top edge of the block. Additional ties can be used to join the back of the block.
5. Anchor the bottom fabric to the ground using wooden 1" x 3" x 18" stakes. The row of stakes placed closest to the block shall be no more than 3" from the BioD-Block and shall be placed at the fabric seams and every 2' along the length of the blocks. A second row of stakes shall be placed at the back edge of the fabric. These stakes shall be placed at the fabric seams and every 3-4' along the length of the block (Figure 2). Care should be taken to avoid damaging plants placed in step 2 when staking in the fabric.
6. Fill soil up to the height of the coir block and mechanically compact the soil. Add compost after compacting so that the finish level is slightly higher than the height of the coir block (Figure 2).
7. Plant bareroot seedlings and grass plugs into the soil/compost mixture. Apply native and nursery grass seed.
8. Pull back the top fabric and anchor it with wooden 1" x 3" x 18" stakes. Use the stakes to create leverage to pull fabric tight to the ground (Figure 3). This first row of stakes should be placed 1.5' from the streamward edge of the blocks. While staking the top fabric, carefully weave bareroot stems through openings in the fabric.
9. Place additional stakes in a staggered pattern between the front and back of the BioD-block to hold the fabric in place.
10. Anchor the back of the block along the seams and every 3-4' while using the same technique as described in step 8. If additional fabric is being installed up-slope of the Bio-D Block, do not anchor the back edge of the fabric until the other fabric has been overlapped and installed. Approximate placement of stakes can be seen in Figure 4.

FIGURE 4



Project: Tanglewood Branch Stream Enhancement		
Sheet No.	County:	Designed By:
25	Washington	MVE
Drawn By:	Date:	
JJH	03/05/2021	

Bid 21-50, Addendum 1



CITY OF
FAYETTEVILLE
ARKANSAS

Date: Tuesday, October 27, 2021

To: All Prospective Vendors

From: Jonathan Smith – 479.575.8220 – jonsmith@fayetteville-ar.gov

RE: Bid 21-50, Construction – Tanglewood Branch Restoration

This addendum is hereby made a part of the contract documents to the same extent as though it were originally included therein. Bidders should indicate their receipt of same in the appropriate blank of the Bid Form. **BIDDERS SHOULD ACKNOWLEDGE THIS ADDENDUM ON THE DESIGNATED LOCATION ON THE BID FORM.**

1. The following deadlines were updated for Bid 21-50. All interested parties shall consider the City Responses below as an official modification to Bid 21-50:

Deadline Updates	
Pre-Bid Meeting	Tuesday, November 9, 2021 at 10 AM – 11 AM
Deadline for Questions and Comments	Friday, November 12, 2021 at 12 PM
Response Deadline	Tuesday, December 7, 2021 at 2 PM
Bid Opening	Tuesday, December 7, 2021 at 2 PM



PRE-BID MEETING INFORMATION

BID 21-50, CONSTRUCTION – TANGLEWOOD BRANCH RESTORATION

A non-mandatory Pre-Bid conference will be held at the jobsite on **Tuesday, November 9, 2021 at 10:00 AM**. Information regarding the pre-bid meeting will also be posted on the project page on the City's electronic bidding platform.

All interested parties are encouraged to attend. The City will transmit to all prospective Bidders of record such Addenda in response to questions arising at the conference. Oral statements may not be relied upon and will not be binding or legally effective.

- **Pre-Bid Meeting / Jobsite Address:** 221 S. School Ave., Fayetteville, AR 72701
 - This is the physical address for the on-site job trailer (Nabholz)
 - Parking is available on site or attendees can park in the Library parking lot
- **Pre-Bid Meeting Requirements:**
 - This is an **ACTIVE** construction site. All attendees will be required to wear the following while attending the pre-bid meeting:
 - hard hat
 - high visibility safety vest

Contract - Bid 21-50
Tanglewood Branch Restoration
Appendix A - City Bid Package



Contract for Bid 21-50
Tanglewood Branch Restoration
Appendix B
Bid Submittal - Flow State, LLC

Document A310™ – 2010

Conforms with The American Institute of Architects AIA Document 310

Bid Bond

CONTRACTOR:

(Name, legal status and address)

Flow State, LLC
6 E Elm Street
Fayetteville, AR 72703

SURETY:

(Name, legal status and principal place of business)

Great American Insurance Company
301 East Fourth Street
Cincinnati, OH 45202

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

OWNER:

(Name, legal status and address)

City of Fayetteville
113 W. Mountain
Fayetteville, AR 72701

BOND AMOUNT: \$ 5%

Five Percent of Amount Bid

PROJECT:

(Name, location or address, and Project number, if any)

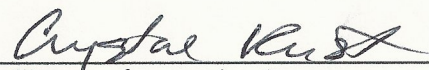
Bid 21-50 Construction - Tanglewood Branch Renovations

The Contractor and Surety are bound to the Owner in the amount set forth above, for the payment of which the Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, as provided herein. The conditions of this Bond are such that if the Owner accepts the bid of the Contractor within the time specified in the bid documents, or within such time period as may be agreed to by the Owner and Contractor, and the Contractor either (1) enters into a contract with the Owner in accordance with the terms of such bid, and gives such bond or bonds as may be specified in the bidding or Contract Documents, with a surety admitted in the jurisdiction of the Project and otherwise acceptable to the Owner, for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof; or (2) pays to the Owner the difference, not to exceed the amount of this Bond, between the amount specified in said bid and such larger amount for which the Owner may in good faith contract with another party to perform the work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect. The Surety hereby waives any notice of an agreement between the Owner and Contractor to extend the time in which the Owner may accept the bid. Waiver of notice by the Surety shall not apply to any extension exceeding sixty (60) days in the aggregate beyond the time for acceptance of bids specified in the bid documents, and the Owner and Contractor shall obtain the Surety's consent for an extension beyond sixty (60) days.

If this Bond is issued in connection with a subcontractor's bid to a Contractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

When this Bond has been furnished to comply with a statutory or other legal requirement in the location of the Project, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

Signed and sealed this 7th day of December, 2021


(Witness) Crystal Rust


(Witness) Kailee Stone

Flow State, LLC

(Principal)

(Seal)

By: 

(Title) John Chapman Owner

Great American Insurance Company

(Surety)

(Seal)

By: 

(Title) Laura D. Mosholder Attorney-in-Fact

GREAT AMERICAN INSURANCE COMPANY®

Administrative Office: 301 E 4TH STREET • CINCINNATI, OHIO 45202 • 513-369-5000 • FAX 513-723-2740

The number of persons authorized by
this power of attorney is not more than FOUR

No. 0 20698

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That the GREAT AMERICAN INSURANCE COMPANY, a corporation organized and existing under and by virtue of the laws of the State of Ohio, does hereby nominate, constitute and appoint the person or persons named below, each individually if more than one is named, its true and lawful attorney-in-fact, for it and in its name, place and stead to execute on behalf of the said Company, as surety, any and all bonds, undertakings and contracts of suretyship, or other written obligations in the nature thereof; provided that the liability of the said Company on any such bond, undertaking or contract of suretyship executed under this authority shall not exceed the limit stated below.

Name	Address	Limit of Power
LAURA D. MOSHOLDER	ALL OF	ALL
EDWARD MORGAN CLARK	SANFORD, FLORIDA	\$100,000,000
KELLY PHELAN		
DON BRAMLAGE		

This Power of Attorney revokes all previous powers issued on behalf of the attorney(s)-in-fact named above.

IN WITNESS WHEREOF the GREAT AMERICAN INSURANCE COMPANY has caused these presents to be signed and attested by its appropriate officers and its corporate seal hereunto affixed this 13th day of AUGUST, 2020

Attest

GREAT AMERICAN INSURANCE COMPANY



Assistant Secretary

Stephen C. Beraha

Mark V. Vicario

Divisional Senior Vice President

STATE OF OHIO, COUNTY OF HAMILTON - ss:

MARK VICARIO (877-377-2405)

On this 13th day of AUGUST, 2020, before me personally appeared MARK VICARIO, to me known, being duly sworn, deposes and says that he resides in Cincinnati, Ohio, that he is a Divisional Senior Vice President of the Bond Division of Great American Insurance Company, the Company described in and which executed the above instrument; that he knows the seal of the said Company; that the seal affixed to the said instrument is such corporate seal; that it was so affixed by authority of his office under the By-Laws of said Company, and that he signed his name thereto by like authority.



SUSAN A KOHORST
Notary Public
State of Ohio
My Comm. Expires
May 18, 2025

Susan A Kohorst

This Power of Attorney is granted by authority of the following resolutions adopted by the Board of Directors of Great American Insurance Company by unanimous written consent dated June 9, 2008.

RESOLVED: That the Divisional President, the several Divisional Senior Vice Presidents, Divisional Vice Presidents and Divisional Assistant Vice Presidents, or any one of them, be and hereby is authorized, from time to time, to appoint one or more Attorneys-in-Fact to execute on behalf of the Company, as surety, any and all bonds, undertakings and contracts of suretyship, or other written obligations in the nature thereof; to prescribe their respective duties and the respective limits of their authority; and to revoke any such appointment at any time.

RESOLVED FURTHER: That the Company seal and the signature of any of the aforesaid officers and any Secretary or Assistant Secretary of the Company may be affixed by facsimile to any power of attorney or certificate of either given for the execution of any bond, undertaking, contract of suretyship, or other written obligation in the nature thereof, such signature and seal when so used being hereby adopted by the Company as the original signature of such officer and the original seal of the Company, to be valid and binding upon the Company with the same force and effect as though manually affixed.

CERTIFICATION

I, STEPHEN C. BERAHA, Assistant Secretary of Great American Insurance Company, do hereby certify that the foregoing Power of Attorney and the Resolutions of the Board of Directors of June 9, 2008 have not been revoked and are now in full force and effect.

Signed and sealed this 7th day of December, 2021



Stephen C. Beraha

Assistant Secretary



CITY OF
FAYETTEVILLE
ARKANSAS

Project Check List

This checklist is for the Bidder's use in preparing & submitting a bid. It is not intended to include all details necessary to prepare a bid and shall not be used as a substitute for the requirements of the bid documents. Information is shown below only as a matter of convenience. Use of this checklist does not relieve the Bidder from the responsibility of meeting all requirements of the Specifications concerning the preparation of an acceptable bid. Bidders are welcome to use this form as a coversheet for a sealed envelope; however, using this form itself is NOT a requirement.



5% Bid Bond of the amount bid accompanied by required documentation (Power of Attorney, etc.)

- In lieu of a bid bond, the bidder may submit a cashier's check from a bank located in the State of Arkansas for at least five percent (5%) of the amount bid (inclusive of any deductive alternates). Cashier's checks shall be made payable to the City of Fayetteville, AR and received prior to the bid deadline by making an in-person delivery appointment with the City Purchasing Division.
- Upload 5% bid bond to the City's electronic bidding platform (preferred) OR attach bid bond with physical submittal and setting up an in-person delivery appointment with the City Purchasing Division.



All addenda shall be signed, acknowledged, and submitted on the appropriate forms (submitting the actual addendums or marking acknowledgement on other bid pages).



All line items shall be appropriately filled out and extended to reveal the line item price as well as the total bid price. Total base bid should be calculated in the provided space.



All pages provided with signature lines shall be appropriately signed, dated accordingly, and included with submitted bid documents



All bids shall be received before the stated deadline utilizing the City's electronic bidding platform or submitting a physical sealed bid to the location listed below. Submitting a bid electronically is strongly encouraged. A public bid opening will be conducted shortly after the deadline at City Hall and livestreamed at <https://www.youtube.com/user/cityoffayettevillear>. Late or misdirected bids shall not be accepted. The City of Fayetteville shall not be responsible for lost or misdirected bids, or failure of bidder's technical equipment. All bid documents shall be delivered in a sealed envelope to the address stated in the advertisement or updated deadline issued via Addenda. All bids should be delivered with the name of the bidder (contractor) on the sealed envelope as well as the bidders Arkansas Contractor's License Number.

City of Fayetteville, AR
Purchasing Division – Suite 306
113 W. Mountain
Fayetteville, AR 72701



Additional Information Required:

- List of Subcontractors: Submit form on electronic bidding portal or attach if submitting a physical bid
- AR Secretary of State Filing: 811266407 or filing number for the state Contractor is established, or submit on the City's electronic bidding platform
- Arkansas Contractor License# or date of application: 0421220323 or submit on the City's electronic bidding platform
- Pursuant Arkansas Code Annotated §25-1-503, the Contractor agrees and certifies that they do not currently boycott Israel and will not boycott Israel during any time in which they are entering into, or while in contract, with any public entity as defined in §25-1-503. If at any time during contract the contractor decides to boycott Israel, the contractor must notify the contracted public entity in writing.
 - Submit on City's electronic bidding platform (preferred), OR circle applicable answer: YES or NO

ARTICLE 1 – BID RECIPIENT

- 1.01 This Bid is submitted to:

The City of Fayetteville, AR

Purchasing Division – Suite 306

113 W. Mountain St

Fayetteville, AR 72702

- 1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.


ARTICLE 2 – BIDDER'S ACKNOWLEDGEMENTS

- 2.01 Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for 60 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

ARTICLE 3 – BIDDER'S REPRESENTATIONS

- 3.01 In submitting this Bid, Bidder represents that:

- A. Bidder has examined and carefully studied the Bidding Documents, and any data and reference items identified in the Bidding Documents, and hereby acknowledges receipt of the following Addenda:

<u>Addendum No.</u>	<u>Addendum, Date</u>	
Bid 21-50, Addendum 1	10/27/21	
_____	_____	
_____	_____	
_____	_____	

- B. Bidder has visited the Site, conducted a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and satisfied itself as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
- C. Bidder is familiar with and has satisfied itself as to all Laws and Regulations that may affect cost, progress, and performance of the Work, including federal requirements.
- D. Bidder has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings, and (2) reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings.

5.02 Bidder acknowledges that (1) each Bid Unit Price includes an amount considered by Bidder to be adequate to cover Contractor's overhead and profit for each separately identified item, and (2) estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all unit price Bid items will be based on actual quantities, determined as provided in the Contract Documents.

ARTICLE 6 – TIME OF COMPLETION

6.01 Bidder agrees that the Work will be substantially complete within 60 calendar days after the date when the Contract Times commence to run as provided in Paragraph 4.01 of the General Conditions, and will be completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions within 75 calendar days after the date when the Contract Times commence to run.

6.02 Bidder accepts the provisions of the Agreement as to liquidated damages.

ARTICLE 7 – ATTACHMENTS TO THIS BID

7.01 The following documents are submitted with and made a condition of this Bid:

- A. Required Bid security;
- B. List of Proposed Subcontractors and qualifications;
- C. List of Proposed Suppliers (N/A);
- D. List of Project References;
- E. Evidence of authority to do business in the state of the Project; or a written covenant to obtain such license within the time for acceptance of Bids;
- F. Contractor's License No. OR date of application for licensure: 0421220323
- G. Required Bidder Qualification Statement with supporting data;
- H. Byrd Anti-Lobbying Amendment Certification (completed and executed on the enclosed form); and
- I. *Any other documents indicated as pertinent*

ARTICLE 8 – DEFINED TERMS

8.01 The terms used in this Bid with initial capital letters have the meanings stated in the Instructions to Bidders, the General Conditions, and the Supplementary Conditions.

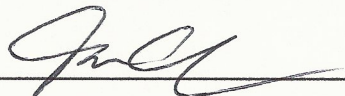
ARTICLE 9 – BID SUBMITTAL

BIDDER: [Indicate correct name of bidding entity]

Flow State LLC

By:

[Signature]



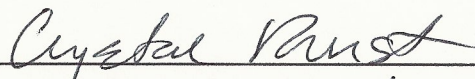
[Printed name]

John Chapman

(If Bidder is a corporation, a limited liability company, a partnership, or a joint venture, attach evidence of authority to sign.)

Attest:

[Signature]



[Printed name]

Crystal Rust

Title:

Witness

Submittal Date:

11/23/21

Address for giving notices:

6 E Elm St

Fayetteville, AR 72703

TAX ID / EIN Number:

83-3849123

Telephone Number:

(479)-422-4759

Fax Number:

N/A

Contact Name and e-mail address:

John Chapman

john@flowstatemapping.com

Bidder's Contractor's License No. OR date of application for licensure:

042/220323

City of Fayetteville, AR
Bid 21-50, Construction – Tanglewood Branch Restoration
Byrd Anti-Lobbying Amendment Certification
44 C.F.R. PART 18 – CERTIFICATION REGARDING LOBBYING

ALL BIDDERS SHALL SUBMIT THIS FORM WITH BID

The undersigned certifies, to the best of his or her knowledge and belief, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
3. The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

The Contractor hereby certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. Chap. 38, Administrative Remedies for False Claims and Statements, apply to this certification and disclosure, if any.

Flow State LLC

Name of Contractor



Signature of Authorized Official

John Chapman, Owner

Name and Title of Contractor's Authorized Official

11/23/21

Date

List of Subcontractors

Subcontractor	Address	Phone	Superintendent/Owner
Devore Excavating, LLC	16726 Sunset Rd Winslow, AR	479-790-4637	Matt Devore

Flow State, LLC
Statement of Qualifications

Owner: John Chapman

Contact: (479)422-4759, 6 E Elm St, Fayetteville, AR 72703, john@flowstatemapping.com

Summary of Qualifications:

- 8 1/2 years of Experience in Natural Channel Design and Stream Restoration
- 7 years of experience directly managing and building stream restoration projects
- Over 1,000 hours of excavation experience constructing stream restoration projects using Natural Channel Design Techniques
- Constructed over 4,000 feet of toe-wood structures, 2,000 of which were on large rivers in deep water environments (> 5'), footered to bedrock.
- Oversaw and constructed j-hooks, cross veins, constructed riffles, and step-pools
- Completed all 4 levels of courses in "Applied Fluvial Geomorphology" and "Natural Channel Design" led by instructor Dave Rosgen, Ph.D.

Project Specific Experience:

*Projects completed while employed as the Watershed Restoration Program Director for The Nature Conservancy (TNC).

2021 – Clinton River, Michigan

438 ft of priority 1 restoration on the Clinton River in Rochester, MI.

Design and Construction Cost: \$189,750

Design by Green Watershed Restoration LLC, Contact Mike Geenen (919)-606-9059

Constructed:

150 feet of toewood

200 feet of brush mattresses

2 rock grade control structures

1 log grade control structure

5,000 cu yards of earthwork

2021 – Rock Creek, Arkansas

Approximately 300 linear feet of stream realignment and priority 2 stream restoration on Rock Creek near West Fork, AR.

Construction cost (not including design, permitting, or material) \$42,840

Design and construction oversight by WCRC

Constructed:

180 feet of deep footered toewood

2 rock and 1 wood grade control structures

1 log j-hook

800 cu yards of channel excavation

2020 – Osage Creek, Arkansas

Approximately 1,500 linear feet of stream restoration on Osage Creek in Rogers Arkansas.

As a sub-contractor constructed approximately 500 feet of deep footed toewood and a 200 foot stacked rock wall.

Design and construction oversight by WCRC, Construction by Natural State Streams LLC.

*2020 - Rockhouse Creek

3,000 - foot Priority 1 Restoration of Rockhouse Creek in Madison County,

Arkansas Construction Cost: \$320,000

Design by Green Watershed Restoration LLC, Contact Mike Geenen (919)-606-9059

Permitting and project management by John Chapman, TNC (479-422-4759

Constructed:

1,100 feet of toewood

6 cross vein structures

9 j-hook structures

7 constructed riffles

20,000 cu yards of earth work

*2019 – South Fork Little Red River

Bank Stabilization project with 600 feet of toe-wood constructed

Construction Cost – \$120,000

Design, Permitting and project management by Joy Wasson, TNC (501)772-0497

*2017/2018 - Oxbow Restoration – Kings River

1500-foot bank stabilization project on the Kings River in Carroll County, Arkansas

Design, Permitting and Project Management by John Chapman and Joy Wasson, TNC (479)422-4759, (501)772-0497

Construction Cost - \$250,000

Constructed:

1,500 feet of toewood

2 rock veins (installed in 2018)

1 modified cross vein (2018)

40,000 cu yards of earthwork

*2016 - Osage Creek

Bank stabilization - 300 foot toewood installation

Design, permitting, and project management by Joy Wasson and John Chapman, TNC (479)422-4759, (501)772-0497

Construction Cost – \$35,000

References:

Scott Simon – Director, The Nature Conservancy Arkansas Chapter, ssimon@tnc.org (501)804-4081

Joy Wasson – Rivers Program Director, The Nature Conservancy Arkansas Chapter, joy.wasson@tnc.org (501)772-0497

Clinton River Restoration:



Rock Creek Restoration:



Osage Creek Restoration:



Rockhouse Creek Restoration:



Oxbow Restoration – Kings River Photos:



Osage Creek Restoration Photos:



Primary Responses

Success: All data is valid!

						Numeric	Text	
Status	Bid/No Bid Decision	#	Item	Quantity Required	Unit of Measurement	Unit Price	Unit of Measurement	Total Cost

Package 01.0 - Bid Table

Success: All values provided	Bid	#1-1	Mobilization (not to exceed 5% of total bid amount)	1	L.S.	\$ 8,000.00	L.S.	\$ 8,000.00
Success: All values provided	Bid	#1-2	Bonds and insurance	1	L.S.	\$ 15,000.00	L.S.	\$ 15,000.00
Success: All values provided	Bid	#1-3	River Channel and Floodplain Excavation / Channel Shaping / Streambank Filling, Shaping and Grading	120	Plan QTY (yd3)	\$ 12.00	C.Y.	\$ 1,440.00
Success: All values provided	Bid	#1-4	Rock Riffle Grade Control Main Channel	5	E.A.	\$ 6,800.00	E.A.	\$ 34,000.00
Success: All values provided	Bid	#1-5	Rock Riffle Grade Control Tributary	28	E.A.	\$ 2,910.00	E.A.	\$ 81,480.00
Success: All values provided	Bid	#1-6	Boulder Clusters	16	E.A.	\$ 1,940.00	E.A.	\$ 31,040.00
Success: All values provided	Bid	#1-7	Field Engineered Boulder Structure	4	E.A.	\$ 6,750.00	E.A.	\$ 27,000.00
Success: All values provided	Bid	#1-8	Rip Rap Removal	6	C.Y.	\$ 350.00	C.Y.	\$ 2,100.00
Success: All values provided	Bid	#1-9	Concrete Extrication and Removal from Channel	50	C.Y.	\$ 50.00	C.Y.	\$ 2,500.00
Success: All values provided	Bid	#1-10	Installation of soil mattresses - complete in place per specifications and drawings	350	L.F.	\$ 47.00	L.F.	\$ 16,450.00
Success: All values provided	Bid	#1-11	Single Rock Toe Bench	90	L.F.	\$ 106.00	L.F.	\$ 9,540.00
Success: All values provided	Bid	#1-12	Double Rock Toe Bench	60	L.F.	\$ 183.00	L.F.	\$ 10,980.00
Success: All values provided	Bid	#1-13	Triple Stack Rock Toe Bench	70	L.F.	\$ 220.00	L.F.	\$ 15,400.00
Success: All values provided	Bid	#1-14	Four Stack Rock Toe Bench	150	L.F.	\$ 229.00	L.F.	\$ 34,350.00
Success: All values provided	Bid	#1-15	Native Stone Revetment	60	C.Y.	\$ 97.00	C.Y.	\$ 5,820.00
Success: All values provided	Bid	#1-16	General Excavation: Excavator (16,000 lbs) - work outside scope of specific bid items (Equipment, Fuel, and Operator) (Based on equipment hours)	40	Hour	\$ 130.00	Hour	\$ 5,200.00
Success: All values provided	Bid	#1-17	General Excavation Skid Steer - work outside scope of specific bid items Skid Steer (Equipment, Fuel, and Operator) (Based on equipment hours)	40	Hour	\$ 100.00	Hour	\$ 4,000.00
Success: All values provided	Bid	#1-18	General Labor	40	Hour	\$ 40.00	Hour	\$ 1,600.00
Success: All values provided	Bid	#1-19	Site Clean-Up including debris removal, grading and mechanical raking of storage areas, loading of excess construction materials on 3rd party trucks	1	L.S.	\$ 5,000.00	L.S.	\$ 5,000.00

Package 02.0 - Deductive Alternative 1 - Rock and Earthwork Materials

Success: All values provided	Bid	#2-1	Top Soil	100	C.Y.	\$ 40.00	C.Y.	\$ 4,000.00
Success: All values provided	Bid	#2-2	Fill Soil	65	C.Y.	\$ 30.00	C.Y.	\$ 1,950.00
Success: All values provided	Bid	#2-3	Clay	20	C.Y.	\$ 60.00	C.Y.	\$ 1,200.00

Success: All values provided	Bid	#2-4	Medium-Large Native Boulders	340	Ton	\$ 100.00	Ton	\$ 34,000.00
Success: All values provided	Bid	#2-5	Large Native Boulders	360	Ton	\$ 100.00	Ton	\$ 36,000.00
Success: All values provided	Bid	#2-6	Flat Native Stone	290	Ton	\$ 100.00	Ton	\$ 29,000.00
Success: All values provided	Bid	#2-7	Native Stone (Shot Rock)	120	Ton	\$ 45.00	Ton	\$ 5,400.00
Success: All values provided	Bid	#2-8	River Cobble	70	Ton	\$ 45.00	Ton	\$ 3,150.00
Success: All values provided	Bid	#2-9	Sorted Creek Gravel	50	Ton	\$ 45.00	Ton	\$ 2,250.00

Package 03.0 - Deductive Alternative 2 - Erosion Control Materials

Success: All values provided	Bid	#3-1	BioD-Blocks 16"	36	E.A.	\$ 230.00	E.A.	\$ 8,280.00
Success: All values provided	Bid	#3-2	Coir wattles 6"	18	E.A.	\$ 50.00	E.A.	\$ 900.00
Success: All values provided	Bid	#3-3	Coir Wattles 9"	5	E.A.	\$ 90.00	E.A.	\$ 450.00
Success: All values provided	Bid	#3-4	Coir Wattles 12"	10	E.A.	\$ 100.00	E.A.	\$ 1,000.00
Success: All values provided	Bid	#3-5	Compost	25	C.Y.	\$ 100.00	C.Y.	\$ 2,500.00
Success: All values provided	Bid	#3-6	Coir Fabric 13.1 ft x 83 ft	480	S.Y.	\$ 4.50	S.Y.	\$ 2,160.00
Success: All values provided	Bid	#3-7	Coir Fabric 6.56 x 166 ft	240	S.Y.	\$ 4.50	S.Y.	\$ 1,080.00
Success: All values provided	Bid	#3-8	Filter Fabric	500	S.Y.	\$ 5.00	S.Y.	\$ 2,500.00
Success: All values provided	Bid	#3-9	Straw Bales	120	E.A.	\$ 10.00	E.A.	\$ 1,200.00
Success: All values provided	Bid	#3-10	18" Wedge Stakes	2240	E.A.	\$ 1.30	E.A.	\$ 2,912.00
Success: All values provided	Bid	#3-11	22" Wedge Stakes	360	E.A.	\$ 1.50	E.A.	\$ 540.00
Success: All values provided	Bid	#3-12	Notch Stakes	1700	E.A.	\$ 1.50	E.A.	\$ 2,550.00



CITY OF
FAYETTEVILLE
ARKANSAS

Contract for Bid 21-50
Tanglewood Branch Restoration
Appendix C
Bid Tabulation



CITY OF FAYETTEVILLE ARKANSAS

BID TABULATION

BID 21-50, CONSTRUCTION - TANGLEWOOD BRANCH RESTORATION

DEADLINE: TUESDAY, DECEMBER 7, 2021 BEFORE 2 PM, LOCAL TIME

CERTIFICATION OF FUNDS

<i>Certified Funds</i>	\$ 550,000.00
<i>25% Additional Allowance Allowed per State Law</i>	\$ 137,500.00
Maximum Award Amount	\$ 687,500.00

SUMMARY OF ALL BID SCHEDULES

FLOW STATE
LLC

TOTAL BASE BID (ALL BID SCHEDULES)

\$ 453,922.00

TOTAL - BID SCHEDULE 1

\$ 310,900.00

TOTAL - BID SCHEDULE 2 (Deductive Alternate 1 of 2)

\$ 116,950.00

TOTAL - BID SCHEDULE 3 (Deductive Alternate 2 of 2)

\$ 26,072.00

DETAILS OF BID SCHEDULES

Bid Schedule Number		
1	Bid Schedule 1 - Line Item Description	Flow State LLC
#1-1	Mobilization (not to exceed 5% of total bid amount)	\$ 8,000.00
#1-2	Bonds and insurance	\$ 15,000.00
#1-3	River Channel and Floodplain Excavation / Channel Shaping / Streambank Filling, Shaping and Grading	\$ 1,440.00
#1-4	Rock Riffle Grade Control Main Channel	\$ 34,000.00
#1-5	Rock Riffle Grade Control Tributary	\$ 81,480.00
#1-6	Boulder Clusters	\$ 31,040.00
#1-7	Field Engineered Boulder Structure	\$ 27,000.00
#1-8	Rip Rap Removal	\$ 2,100.00
#1-9	Concrete Extrication and Removal from Channel	\$ 2,500.00
#1-10	Installation of soil mattresses - complete in place per specifications and drawings	\$ 16,450.00
#1-11	Single Rock Toe Bench	\$ 9,540.00
#1-12	Double Rock Toe Bench	\$ 10,980.00
#1-13	Triple Stack Rock Toe Bench	\$ 15,400.00
#1-14	Four Stack Rock Toe Bench	\$ 34,350.00
#1-15	Native Stone Revetment	\$ 5,820.00
#1-16	General Excavation: Excavator (16,000 lbs) - work outside scope of specific bid items (Equipment, Fuel, and Operator) (Based on equipment hours)	\$ 5,200.00
#1-17	General Excavation Skid Steer - work outside scope of specific bid items Skid Steer (Equipment, Fuel, and Operator) (Based on equipment hours)	\$ 4,000.00
#1-18	General Labor	\$ 1,600.00
#1-19	Site Clean-Up including debris removal, grading and mechanical raking of storage areas, loading of excess construction materials on 3rd party trucks	\$ 5,000.00
TOTAL COST FOR BID SCHEDULE 1		\$ 310,900.00
Bid Schedule Number 2	Bid Schedule 2 - Deductive Alternate 1 - Line Item Description	
#2-1	Top Soil	\$ 4,000.00
#2-2	Fill Soil	\$ 1,950.00
#2-3	Clay	\$ 1,200.00
#2-4	Medium-Large Native Boulders	\$ 34,000.00
#2-5	Large Native Boulders	\$ 36,000.00

#2-6	Flat Native Stone	\$ 29,000.00
#2-7	Native Stone (Shot Rock)	\$ 5,400.00
#2-8	River Cobble	\$ 3,150.00
#2-9	Sorted Creek Gravel	\$ 2,250.00

TOTAL COST FOR BID SCHEDULE 2		\$ 116,950.00
--------------------------------------	--	----------------------

Bid	
Schedule	
Number 3	
Bid Schedule 3 - Deductive Alternate 2 - Line Item Description	

#3-1	BioD-Blocks 16"	\$ 8,280.00
#3-2	Coir wattles 6"	\$ 900.00
#3-3	Coir Wattles 9"	\$ 450.00
#3-4	Coir Wattles 12"	\$ 1,000.00
#3-5	Compost	\$ 2,500.00
#3-6	Coir Fabric 13.1 ft x 83 ft	\$ 2,160.00
#3-7	Coir Fabric 6.56 x 166 ft	\$ 1,080.00
#3-8	Filter Fabric	\$ 2,500.00
#3-9	Straw Bales	\$ 1,200.00
#3-10	18" Wedge Stakes	\$ 2,912.00
#3-11	22" Wedge Stakes	\$ 540.00
#3-12	Notch Stakes	\$ 2,550.00

TOTAL COST FOR BID SCHEDULE 3		\$ 26,072.00
--------------------------------------	--	---------------------